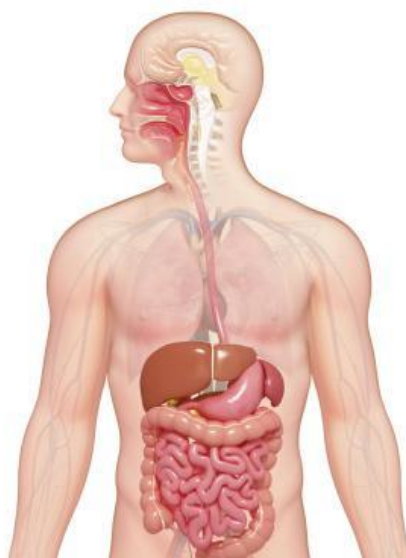


**MINISTRY OF HEALTH OF UKRAINE
ZAPORIZHZHIA STATE MEDICAL UNIVERSITY**

Foreign Languages Department

O.V. Gordiyenko, O.L. Solyanenko



**MEDICAL ENGLISH: CASE REPORTS.
GASTROINTESTINAL SYSTEM**

Methodical handbook

**to the course "English for specific purposes (Medicine)",
the 2nd year study, medical faculties**

Zaporizhzhia

2016

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Guidelines ratified on meeting of the Central methodical committee of Zaporizhzhia state medical university (protocol number 2(24.11.2016) and it is recommended for the use in educational process for medical faculty students

Compilers:

Gordiyenko O. V., Ph.D., Associate Professor, Foreign Languages Department, Zaporizhzhia State Medical University

Solyanenko O. L., assistant, Foreign Languages Department, Zaporizhzhia State Medical University

Reviewers:

Luzhanitsa O. I., Ph.D., Associate Professor, Department of English Philology, Zaporizhzhia National University;

Klimenko L.V., Ph. D., Associate Professor, Department of Foreign Languages, Zaporizhzhia State Engineering Academy.

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This methods handbook is recommended for individual work of the 2nd year students of medical faculties. The work contains authentic texts which include tasks for individual work according to the discipline "English for specific purposes (Medicine)".

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Укладачі:

Гордієнко О.В., к. філол. н., доцент кафедри іноземних мов ЗДМУ

Соляненко О.Л., викладач кафедри іноземних мов ЗДМУ

Рецензенти:

Лужаниця О.І., к. філол. н., доцент кафедри англійської філології ДВНЗ «Запорізький національний університет»;

Кліменко Л. В., к. пед. н., доцент кафедри іноземних мов Запорізької державної інженерної академії.

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ПЕРЕДМОВА

Формування професійного наукового дискурсу з англійської мови дає можливість участі у міжнародних навчальних проектах, сприяє самовдосконаленню лікаря, де є необхідність вивчення англомовних медичних та наукових джерел. Тож теоретичною основою, яка визначила зміст, структуру посібника та методику роботи є положення про характер продуктивних вмінь спеціалістів-нелігвістів в іноземній мові й умови їх становлення і розвитку.

Навчальний посібник призначено для студентів другого курсу медичних факультетів, спеціальностей 7.1210001 «Лікувальна справа», 7.12010002 «Педіатрія», які ставлять за мету поглибити свої знання медичної термінології пов'язаною з травною системою. Посібник складено з урахуванням вимог навчальної дисципліни «Іноземна мова (за професійним спрямуванням)»: затверджено МОЗ України 12.03.2010 р., відповідно до ОКХ та ОПП підготовки фахівців, затверджених наказом МОН України від 16.04.03 № 239, експериментальним навчальним планом, розробленим за принципами Європейської кредитно-трансферної системи (ECTS) і виконання наказу МОЗ України від 19.10.2009 № 749 «Про затвердження та введення наказу навчального плану підготовки фахівців освітньо-кваліфікаційного рівня «спеціаліст», кваліфікації «лікар» у вищих навчальних закладах IV рівня акредитації за спеціальностями «Лікувальна справа», «Педіатрія», «Медико-профілактична справа» та наказу МОН України від 09.07.2009 р. № 642 «Про організацію вивчення гуманітарних дисциплін за вільним вибором студента».

Посібник має на меті розширення у студентів словникового запасу, розвиток навичок читання і вивчення структури історії хвороби. Також велика увага приділяється засвоєнню активної лексики та особливостям її значення в різних контекстах, володінню навичками пошукового читання, складання діалогів на ситуативно зумовлену й професійну тематику.

Зміст посібника складають 8 розділів: передмова, зразок оформлення історії хвороби, структура травної системи, 5 блоків історії хвороб, список використаних джерел, додаток 1 «Історія хвороби», додаток 2 «Словник», додаток 3 «Медичні аббревіатури».

У посібнику поєднано вправи рецептивного і репродуктивного характеру, що виконують ознайомлювальну функцію та вправи, які сприяють активному самостійному використанню термінологічній лексики відповідно до ситуації.

При розробці навчально-методичного посібника для самостійних робіт студентів II курсу медичних факультетів «Medical English: Case Reports. Gastrointestinal System» було використано такі джерела теоретичного та фактичного матеріалу: Conklin L. At the Doctor's office [Електронний ресурс] / L. Conklin. – Режим доступу http://escurriculum.spps.org/sites/0986df53-fb39-4fa2-816b-03b698926774/uploads/listening_a_health_j.pdf; Glendinning E. English in Medicine : a course in communication skills / E. Glendinning, B. Holmstrom. – Cambridge : Cambridge University Press, 2005. – 150 p.; Glendinning E. Professional English in Use Medicine / E. Glendinning, R. Howard. – Cambridge : Cambridge University Press, 2013. – 173 p.; www.pubmed.com; www.hindawi.com та ін. (див. список використаних джерел).

Посібник призначено для студентів II курсу, як джерело, що містить завдання до самостійної роботи за темами змістовних модулів дисципліни.

I. STRUCTURE OF CASE HISTORY

Task 1. Read about the structure of Case History and translate into your native language.

The Case History is all the relevant information or material gathered about an individual, family, group, etc., and arranged so as to serve as an organized record and have analytic value for a social worker, student, or the like: used especially in social work, sociology, psychiatry, and medicine.

1.1 Introduction

An introduction is necessary to establish the focus of a case and provide orientation to a reader. It should consist of a few clear and concise opening statements, which typically include information on:

- Name (pseudonym)
- Age
- Marital status
- Occupation
- Referral details
- Central problem

1.2 History of Presenting Complaint

This should be a detailed account of the *patient's central problem* that you have already identified in your opening statement. Put details about the problem and related symptoms in a *chronological order*, as this will help with the clarity of your writing.

- *Identify common psychiatric symptom.* You should make connections between the isolated symptoms that the patient may have revealed to

you somewhat randomly in their interview by grouping the symptoms together (i.e. depressive, psychotic, anxiety). This will help your writing to develop logical sequences. It may be necessary to comment on relevant negative as well as positive symptoms.

- *Comment on the impact of the illness on the patient's life.* Consider work, social relations and self-care.
- *Note details of previous treatment.* Include information on who administered management (when and where), what the treatment was (and preferably the dose and duration of treatment), and the patient's responses to treatment.
- *Integrate current problem and psychiatric issues.* Consider the relationship between the patient's psychiatric state and concurrent medical conditions.

1.3 Past Medical History

In this section of the report, you need to show that you a) understand the relationship between medical conditions and psychiatric symptoms, and b) can appreciate the complexity of medical problems that might be exacerbated by psychiatric conditions.

Record medications. Demonstrate an understanding of the significance of drug therapy on psychological function and, if appropriate, focus on medications taken by the patient that may influence the patient's psychological function.

1.4 Summary and diagnosis

The summary must draw on all areas in the earlier parts of the report. New information cannot be introduced.

Essentially the summary will contain a brief outline of:

- Who the patient is
- What his problems are
- What effects the problems are having on the patient
- As well as a brief indication of:
 - Why the problems arose (precipitating factors)
 - How the problems arose (predisposing factors)
 - Factors influencing progression / the course of the problems (perpetuating and protective factors)

Features may be drawn from all aspects of the history and examination, and should include relevant negatives (features of the diagnosis and differential diagnoses that are not present).

The diagnosis will require you to synthesis signs and symptoms in the case report to identify core problems. You should explicate your reasoning for drawing the links between signs and symptoms and diagnostic decision-making. In other words, what important aspects in the History, Mental State Examination and Physical Examination lead you to making the provisional diagnosis? Pick out the relevant pieces of these sections and make links with the final diagnosis (and differential diagnoses).

One way to approach explaining your reasoning is for you to take each differential diagnosis and write down the pros and cons evident in the earlier parts of our report that serve to support or discount the likelihood of the differential diagnosis.

1.5 Management

On the basis of your formulation, you will need to outline appropriate management plans, including:

- Investigations;
- Short-term goals;
- Long-term goals.

SHORT CASE HISTORY

Task 2. Read the Short Case History (A Case History is represented in Appendix 1) and translate into your native language.

SURNAME <i>Jameson</i>	First name <i>Alan</i>
AGE <i>53</i> SEX <i>M</i>	MARTIAL STATUS <i>M</i>
OCCUPATION <i>Carpenter</i>	
PRESENT COMPLAIN <i>Acute backache referred down R sciatic nerve distribution. Began 6/52 ago and became more severe over past 2/52. Affecting work and waking him at night. Also 6/0 tingling in R foot. Wt loss 3 kg. Depressed</i>	
O/E General condition <i>Fit, well-muscled</i> ENT <i>NAD</i> RS <i>NAD</i> CVS <i>P</i> <i>BP</i> <i>HS</i> GIS <i>NAD</i> GUS <i>NAD</i> CNS <i>Loss of lumbar lordosis, spasm of R erector spinae. Straight leg raising R restricted to 45 °. Reflexes present equal. Neural-depressed R ankle jerc.</i>	
IMMEDIATE PAST HISTORY <i>Paracetamol helped a little with previous intermitted basic pain.</i>	
POINTS OF NOTE <i>Carpenter- active work</i> <i>1.78m, 68kg –tall, slightly-built</i>	

DIAGNOSIS

Prolapsed intervertebral disc

MANAGEMENT

Dihydrocodeine 30mg 2 q.d.s. p.c.

Bed rest, physio

LIST OF ABBREVIATIONS

O/E	On examination
RS	Respiratory system
CVS	Cardiovascular system
BP	Blood pressure
P	Pulse
HS	Heart Sounds
Reg.	regular
CIS	Gastro-intestinal system
GUS	Genito-urinary system
CNS	Central Nervous System
NAD	Nothing abnormal detected
3/52	Three weeks
3/7	Three days
-ve	negative
?	query/ possible

LIST OF DOCTOR'S QUESTIONS

Task 3. Read the most frequent doctor's questions and pay attention to the terms and phrases in bold.

The doctor / patient interview is a something that each person individualizes to meet their own needs. The elements below are intended as a guide for practicing an interview in English. Each element is followed by one or more sample questions which could be used for the interview element.

Personal History

Patient's name	<ul style="list-style-type: none">• Please tell me your first and last name.• Could you please tell me your first and last name?• Can you spell your last name for me, please?
Determine the patient's age, height and weight	<ul style="list-style-type: none">• How old are you?• When were you born?• How much do you weigh?• What is your height?
Determine the patient's occupation	<ul style="list-style-type: none">• What do you do for a living?• How long have you worked in your present job?• What did you do before your present job?• Is your work stressed?

	<ul style="list-style-type: none"> • Is there much physical activity associated with your work? • How long have you been retired?
Lifestyle (social) history	<ul style="list-style-type: none"> • Do you smoke? • How much do you smoke? • How old were you when you started smoking? • Do you drink beer, wine or spirits? • How often do you drink? • How often do you drink alone? • How much do you drink? • Have you noticed a recent increase or decrease in your weight? • Do you have any allergies; things like food allergies or allergies to medications?

Chief complaint (CC)

Determine the patient's CC	<ul style="list-style-type: none"> • How can I help you today? • What seems to be the problem? • What brings you in to see me today?
-------------------------------	--

<p>Determine the duration of the CC</p>	<ul style="list-style-type: none"> • When did you last feel perfectly well? • When did this problem start? • How long have you had this problem? • Have you taken any kind of medicine for your problem? • What kind of medicine did you take • How much of this medicine have you taken? • Did the medicine help?
<p>Assess any aggravating or relieving factors</p>	<ul style="list-style-type: none"> • Is there anything that makes this problem worse? • Is there anything that makes this problem better?
<p>Determine the onset of the CC</p>	<ul style="list-style-type: none"> • Did this problem start slowly or did it come on quite suddenly?
<p>Assess any pain associated with the problem</p>	<ul style="list-style-type: none"> • Does this problem cause you any pain? • Can you describe the pain for me? • Is it stabbing or burning? • Is it constant or intermittent? • Is it throbbing or pounding? • Is it sharp or dull? • How would you rank the pain on a scale of one to ten? • Does the pain disrupt your daily activities?

	<ul style="list-style-type: none"> • Does the pain radiate to any other part of your body? • Does the pain keep you awake at night?
--	---

Current and past medical history

<p>Determine Current and past medical history</p>	<ul style="list-style-type: none"> • Do you have any current health problems such as diabetes or high blood pressure? • How long have you had this condition? • Have you seen a doctor for this condition? • Are you taking any medications for this condition? • Can you tell me the name of the medication? • Do you know what doses you take? • How often do you take this medication? • When did you last see a doctor for this condition? • Have you had any recent illnesses or health problems other than the one that brought you in today?
<p>Family history</p>	<ul style="list-style-type: none"> • Do your parents have any health problems? How old are they? • I'm sorry to hear that, what was the cause of your mother's (father's) death? • How old was she (he) when she (he) died? • Do you have any brothers or sisters? How old are they? • Do they have any health problems? • Are you married?

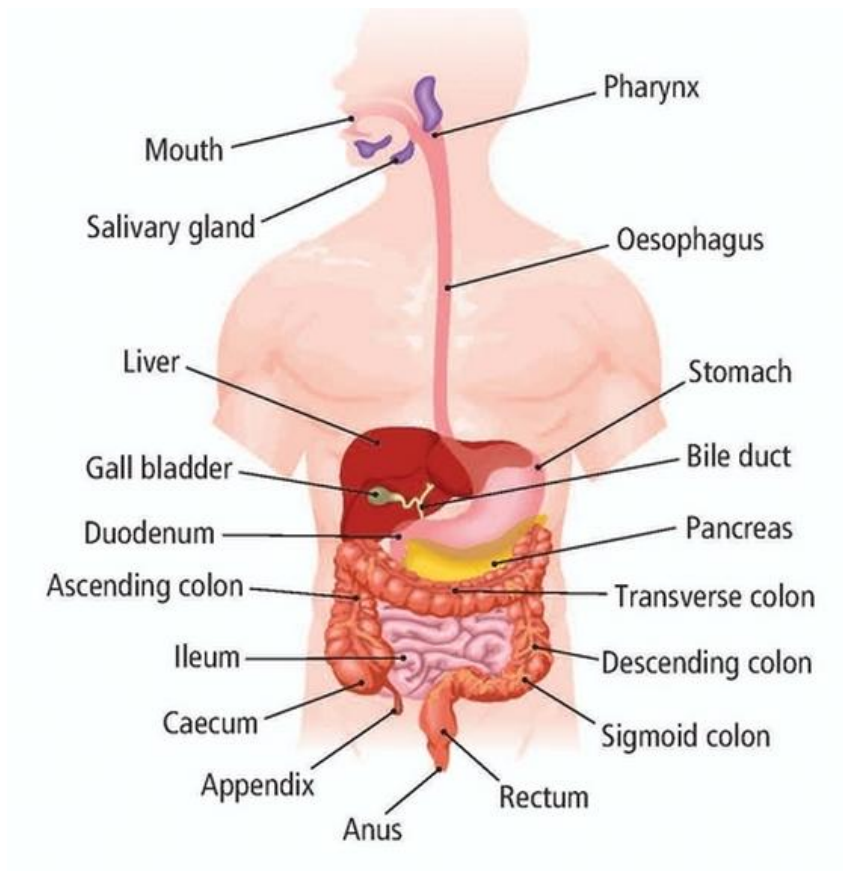
	<ul style="list-style-type: none">• Do you have any children?• How old are they?• Do they have any health problems?• Is there a history of (high blood pressure, cancer, asthma, diabetes etc.) in your family? Drug history• Are you taking any prescription medications? Pills Injections Inhalers• Do you use any alternative treatments or remedies for any health problems?• Are you taking any over-the-counter (OTC) medicines?
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II. GASTROINTESTINAL SYSTEM STRUCTURE

Task 1. Learn the Gastrointestinal System, read and translate into your native language Gastrointestinal System Diseases.

Digestion is the unique and the complex process of turning the eaten food into nutrients, which the body uses for energy to survive.

The digestive tract (or gastrointestinal tract) is a long twisting tube that starts at the mouth and ends at the anus. It is made up of a series of muscles that coordinate the movement of food and other cells producing enzymes and hormones for food breakdown.



The mouth is the beginning of the digestive system, and, in fact, digestion starts here with the help of salivary glands.

The salivary glands are inside both sides of the lower jaw. They secrete saliva, containing enzymes that act on carbohydrates. The saliva also moistens the food for swallow.

The pharynx is the part of the digestive tract that receives the food from the mouth.

The esophagus is a muscular tube located in the pharynx (the throat) near the trachea (windpipe). By means of a series of muscular contraction called peristalsis, the esophagus carries food to the stomach.

The stomach is a sac-like organ with strong muscular walls. It may be named as “a container” that not only holds food, by secreting of its acid and powerful enzymes continues the process of breaking down the food into a consistency of liquid or paste.

The small intestine is made up of three segments: the duodenum, jejunum, and ileum. It is a long muscular tube that breaks down food using enzymes released by the pancreas and bile from the liver.

The duodenum is responsible for the continuous breaking-down process of the food. The food breaking down process and the process of food absorbing are helped by such accessory digestive organs as the pancreas, the liver and the gallbladder.

The pancreas secretes digestive enzymes into the duodenum. It also makes insulin, the chief hormone for metabolizing sugar, which is directly delivered into the bloodstream.

The liver is a dark brown organ in upper abdomen. It has multiple functions, but there are two of its main ones within the digestive system. The first function is to make and secrete an important substance called bile. The second one is to process the blood, coming from the small intestine and containing the nutrients just

absorbed. The liver also detoxifies potentially harmful chemicals. It breaks down and secretes a lot of drugs.

The gallbladder is a storage sac for excess bile. It is located under the liver. Bile made in the liver flows to the small intestine via the bile ducts. Bile serves two main purposes. First, it helps absorb fats and secondly, it carries waste from the liver that cannot go through the kidneys.

The colon (large intestine) is a long muscular tube that connects the small intestine to the rectum. The large intestine consists of the cecum, the ascending (right) colon, the transverse colon, the descending (left) colon, and the sigmoid colon.

The large intestine is a highly specialized organ that is responsible for processing waste (stool), that passes through the colon by means of peristalsis. The function of the descending colon is to empty its contents into the rectum.

The appendix is a small tube attached to the cecum.

The rectum is a chamber that connects the colon to the anus. To receive stool from the colon, to let the person know that there is stool to be evacuated and to hold the stool until evacuation happens are “the rectum’s tasks”.

The anus is the last segment of the digestive tract, consisting of the pelvic floor muscles and the two anal sphincters (internal and external). The anus is surrounded by sphincter muscles that are important in providing control of stool.

GASTROINTESTINAL DISEASES AND THEIR SYMPTOMS

Digestive System diseases are a group of disorders that affect the human digestive tract. Such disorders may affect the esophagus, the stomach, the small intestine, the large intestine (colon), the pancreas, the liver, or biliary tract.

Achalasia	a failure of smooth muscle fibers to relax, which can cause a sphincter to remain closed and fail to open when needed
Celiac disease	an inherited autoimmune digestive disorder in which people cannot tolerate gluten, a protein constituent of wheat, barley, malt, and rye flours
Cholecystitis	acute or chronic inflammation of the gallbladder, in most instances associated with the presence of gallstones in the gallbladder
Cholera	an acute infection of the small intestine caused by the bacterium <i>Vibrio cholerae</i> and characterized by extreme diarrhea with rapid and severe depletion of body fluids and salts
Cirrhosis	irreversible change in the normal liver tissue that results in the degeneration of functioning liver cells and their replacement with fibrous connective tissue
Clonorchiasis	chronic infection caused by <i>Clonorchis sinensis</i> , or liver fluke, a parasitic worm some 10 to 25 mm long that lives in the bile ducts of the liver in humans and other mammals
Colorectal cancer	disease characterized by uncontrolled growth of cells within the large intestine (colon) or rectum (terminal portion of the

	large intestine)
Constipation	delayed passage of waste through the lower portion of the large intestine, with the possible discharge of relatively dry, hardened feces from the anus
Crohn disease	chronic inflammation of the digestive tract, usually occurring in the terminal portion of the ileum, the region of the small intestine farthest from the stomach
Diarrhea	abnormally swift passage of waste material through the large intestine, with consequent discharge of loose feces from the anus
Dysentery	infectious disease characterized by inflammation of the intestine, abdominal pain, and diarrhea with stools that often contain blood and mucus
Dysphagia	difficulty or pain in swallowing, caused by lesions or stricture of the upper digestive tract, obstruction of the upper digestive tract by tumours or foreign bodies, or disturbances in the nervous or muscular control of swallowing
Enteritis	inflammation of the intestines (especially of the small intestine), caused by irritants, poisons, viral or bacterial infections, or unknown factors
Esophageal cancer	disease characterized by the abnormal growth of cells in the esophagus, the muscular tube connecting the oral cavity with the stomach
Gallstone	presence of crystalline substances concretion (usually cholesterol, bile pigments, and calcium salts) embedded in an

	amount of protein material formed most often in the gallbladder
Gastritis	acute or chronic inflammation of the mucosal layers of the stomach
Gastroenteritis	acute infectious syndrome of the stomach lining and the intestine
Gastroesophageal reflux disease (GERD)	digestive disorder characterized by frequent passage of gastric contents from the stomach back into the esophagus
Hematuria	presence of blood in the urine, an indication of injury or disease of the kidney or some other structure of the urinary tract
Hepatitis	inflammation of the liver. This disease may be infectious or noninfectious
Ileitis	chronic inflammation of one or more sections of the intestine
Incontinence	inability to control the excretion of urine or feces
Indigestion	any or all of the symptoms—abdominal discomfort, belching, flatulence, aversion to eating, nausea, vomiting, diarrhea, constipation, heartburn—associated with the malfunctioning of the digestive system
Inflammatory bowel disease (IBD)	chronic inflammation of the intestines that results in impaired absorption of nutrients

Intestinal obstruction	functional or mechanical blockage of the alimentary canal
Intestinal squeeze	pain and possible injury to the small or large intestine caused by expansion of trapped gases because of rapid changing of atmospheric pressure
Irritable bowel syndrome (IBS)	relatively common disorder of the intestines characterized by abdominal pain, intestinal gas, and altered bowel habits, including diarrhea, constipation, or both
Jaundice	excess accumulation of bile pigments in the blood stream and bodily tissues
Laryngeal cancer	malignant tumor of the larynx
Laryngitis	inflammation of the larynx or voice box, caused by chemical or mechanical irritation or bacterial infection
Liver cancer	any of several forms of disease characterized by tumors in the liver
Megacolon	massive enlargement and dilation of the large intestine (colon)
Nausea	feeling of discomfort in the pit of the stomach
Pharyngitis	inflammatory illness of the mucous membranes and underlying structures of the throat (pharynx)
Proctitis	acute inflammatory infection of the anus and rectum
Proteinuria	presence of protein in the urine, usually as albumin
Rectocele	disorder among women in which the rectum bulges into the back wall of the vagina

Shigellosis	infection of the gastrointestinal tract by bacteria of the genus <i>Shigella</i>
Stomach cancer	a disease characterized by abnormal growth of cells in the stomach
Tropical sprue	an acquired disease characterized by the small intestine's impaired absorption of fats, vitamins, and minerals
Ulcerative colitis	inflammation of the large intestine (colon), especially of its mucous membranes, characterized by patches of tiny ulcers in the inflamed membrane
Volvulus	twisting of a portion of the digestive tract on its mesentery
Vomiting	the forcible ejection of stomach contents from the mouth
Yersiniosis	acute gastrointestinal infection caused by the bacterium <i>Yersinia enterocolitica</i>

III. CASE HISTORIES

GASTROINTESTINAL SYSTEM

Case History I.

A Higher Risk of Developing Gastrointestinal Reflux with Esophageal Sclerosis

Task 1. Read and translate the case history. Pay attention to the terms and phrases in bold.

GENERAL INFORMATION:

First name, patronymic: Johanna Karlsdottir

Age: 76

Sex: female

Nationality: Icelandic

Education: secondary

Marital status: widow

Home address: Borgarhraun 14, 240 Grindavik 410-8900, Iceland

Profession: retired

CASE REPORT:

A 76-year-old never-smoker female was presented to the emergency department complaining of shortness of breath and **retrosternal** discomfort, after a choking episode which had awakened her during the night. Physical examination revealed limited thickness of the fingers, presence of ulcers in the oral cavity, palmar **telangiectasias** and slightly audible **crackle** sounds bilaterally in the lower respiratory fields. Her vital signs were as follows: blood pressure 160/95 mm Hg, heart rate 110 bpm, temperature 37.3°C, respiration rate 20/min and SatO₂ 84%. Due to low SatO₂ levels, arterial blood gas examination was performed, revealing

PaO₂ 51 mm Hg, PCO₂ 50 mm Hg and pH 7.36. Chest X-ray and electrocardiogram did not reveal any significant pathological findings. Blood tests at admission demonstrated **leukocytosis** (11,800/mm³), slight **thrombocytosis** (410,000/mm³), C-reactive protein levels of 3.8 mg/dl and serum lactic **dehydrogenase** of 412 IU/l. The rheumatological patient's medical history included presence of **Sjögren's syndrome**, rheumatoid arthritis and **cutaneous sclerosis** (with clinical regression under treatment) and GERD (under anti-secretory treatment). At addition, she reported that approximately 6 months before she had been diagnosed with **Raynaud syndrome** and arterial hypertension and since then she had been receiving oral **nifedipine** (40 mg) daily. The patient mentioned that after the initiation of treatment with nifedipine, arterial hypertension was controlled and she did not experience any other Raynaud phenomenon crisis; nevertheless, she reported signs of gradual intolerance of physical exercise, productive cough episodes and choking episodes particularly at night, along with **exacerbation** of GERD symptoms, despite receiving anti-secretory treatment with **proton pump inhibitors**.

As developing **aspiration pneumonia** was suspected and since chest X-ray was of no diagnostic value, the patient underwent thoracic CT scanning, which revealed thickening of the esophageal wall, along with **bolus retention**, and slight intralobular reticular **opacity** with peripheral distribution in both lungs, with evident signs of **chronic interstitial disease** (fig.1). Considering the patient's history, physical examination, laboratory test results and imaging findings, the diagnosis of organizing non-specific interstitial pneumonia was made.

Figure 1



*Thoracic CT imaging: Evident bolus retention in the **lumen** of the esophagus (short arrows), due to impaired esophageal **peristalsis**, and slight intralobular reticular opacity with peripheral distribution in both lungs, compatible with interstitial disease.*

The initial management of the patient in the emergency department consisted of aggressive administration of 50% O₂, salbutamol, ipratropium and budesonide through a **Venturi mask** and intravenous administration of hydrocortisone and omeprazole. After 2 h, the patient's clinical condition had improved, with a new SatO₂ of 93% and regression of **dyspnea**. The patient was referred to the Department of Respiratory Medicine for further hospitalization and was discharged after 9 days in excellent clinical condition. It was decided that nifedipine treatment for Raynaud syndrome should be replaced with diltiazem, which has proven to affect less esophageal **dysmotility** and lower sphincter pressure, compared to other CCBs. Moreover, the daily dose of anti-secretory therapy with omeprazole was doubled. Nearly 12 months after her admission to the emergency department, the patient has not experienced similar severe GERD symptoms or respiratory complications, with both arterial hypertension and Raynaud syndrome efficiently controlled.

ABBREVIATIONS:

BP- Blood pressure

HR- Heart rate

Bpm - beats per minute

Sat O₂ - oxygen saturation

RR - respiratory rate

Pa O₂ . arterial oxygen

PCO₂ . partial pressure of carbon dioxide

ABG - arterial blood gas

mg/dl - milligrams per deciliter

IU/l - International Units per Liter

CRP – c-reactive protein

GERD - gastroesophageal reflux disease

CT - computed tomography

CCB - calcium channel blockers

VOCABULARY

Retrosternal		situated or occurring behind the sternum
Reveal	ri'vi:l	to make (something secret or hidden) publicly or generally known
Palmar	'pælmə	relating to the palm (the grasping side) of the hand
Telangiectasias		an abnormal dilation of red, blue, or purple superficial capillaries, arterioles, or venules typically located just below the skin's surface

Crackle sound	'krækl saund	a series of short, sharp noises of air moving through the tracheobronchial tree, heard during auscultation of the chest
Leukocytosis		an increased number of white blood cells
Thrombocytosis		an abnormality increased number of platelets in the blood
Dehydrogenase	di:'haɪdrədʒənz	an enzyme that helps conversing lactate into pyruvate and back
Sjögren's syndrome	'sɪndrəʊm	a chronic inflammatory autoimmune disease that affects as a rule older women, that is characterized by dryness of mucous membranes especially of the eyes and mouth and by infiltration of the affected tissues by lymphocytes, and that is often associated with rheumatoid arthritis
Cutaneous sclerosis	kju(:)'teɪnjəs sklɪə'rəʊsɪs	a multisystem autoimmune disease
Raynaud syndrome	'sɪndrəʊm	excessively reduced blood flow in response to cold or emotional stress, causing discoloration of the fingers, toes, and occasionally other areas
Nifedipine		a calcium channel blocker $C_{17}H_{18}N_2O_6$ that is a coronary vasodilator used especially in the treatment of angina pectoris

Exacerbation	eks, æsə(:)'beɪʃən	increasing severity of a disease or any of its symptoms
Proton Pump Inhibitors (PPIs)	'prəʊtɒn pʌmp ɪn 'hɪbɪtəz	a group of drugs, that reduce the acid production in the stomach
Aspiration pneumonia	,æspə'reɪʃ(ə)n nju(:)'mæʊnjə	a disease, when food, saliva, liquid or vomit is breathed into the lungs or airway leading to the lungs instead of being swallowed into the esophagus and the stomach
Bolus retention	'bəʊləs rɪ'tenʃən	a rounded mass as a soft mass of chewed food
Opacity	əʊ'pæsɪti	the condition of a tissue or structure, that makes it impervious to the rays of light
Chronic interstitial disease	'krɒnɪk ,ɪntə(:)'stɪʃəl dɪ'zi:z	a lung disease that affects the interstitium (the tissue and space around the air sacs of the lungs), persisting for a long time
Lumen	'lu:mən	the cavity of a tubular organ
Esophageal peristalsis	ɪ,sɒfə'dʒiəl ,perɪ'stælsɪs	waves of involuntary contraction passing along the walls of the esophagus
Venturi mask	mɑ:sk	a type of disposable face mask used to deliver a controlled oxygen concentration to a patient

Dyspnea	disp'niə	difficult or labored breathing; shortness of breath
Dysmotility		a condition in which muscles of the digestive system become impaired and changes in the speed, strength or coordination in the digestive organs occurs

EXERCISES

EXERCISE 1. Choose the right term:

Colon, cancer, acid, poisoning, the large intestine, vomiting, nausea, problem, jaundice, gastrointestinal disease

1. A common and difficult to treat _____ is esophageal disease in progressive systemic sclerosis (PSS).
2. Inflammation of the lining of _____ is a disease, which is called dysentery.
3. Loss of appetite, pain, nausea, _____ and bleeding from stomach are the symptoms of a person, suffering from gastritis.
4. Abnormal cells (in some people with GERD) may lead to _____ of the esophagus.
5. Spasms of the muscles in the wall of the _____ cause amebic colitis.
6. Sodium bicarbonate may be prescribed to correct the pH balance of the body when _____ produces a metabolic acidosis.
7. Diarrhoea may be got when you have been in contact with somebody who has it or from food _____ - after eating contaminated food or drinking contaminated water.
8. A yellowish discoloration of the sclera (eye white area) and the skin is the main symptom of _____.

9. All stimuli that cause _____ work via the vomiting centre in the brain, which gives signals to the sensation of it and coordinates the physical act of vomiting.

10. Your esophagus can be damaged by _____ and it is possible hard to swallow.

EXERCISE 2 Match the word with the definitions

Pancreas	a dark colored elongated organ, filtering the blood
Colon	It stores solid waste until it leaves the body through the anus
Rectum	a punch, connecting ileum with the ascending colon of the large intestine
Spleen	a dark brown organ in upper abdomen which creates bile
Caecum	an organ (located under the small intestine) producing chemicals and hormones
Liver	a sac, located under the liver. Storing bile is its function
Esophagus	a continuation of the pyrolic end of the stomach
Small intestine	It consists of four sections: ascending, transverse, descending and colon
Gallbladder	It is known as “food pipe”, it comes down from the mouth to the stomach
Duodenum	first and the main digestive part of the small intestine

EXERCISE 3. Choose the correct answers.

1. Calcium channel blocker is a ... that inhibits calcium ion reflux into cells or inhibits the movement of intracellular calcium stores.

- a) supplement
- b) vitamin
- c) drug
- d) inhibitor

2. Jaundice is often seen in liver disease such as ... or liver cancer.

- a) hepatitis
- b) gastritis
- c) pyelonephritis
- d) enteritis

3. A gallstone stuck in the cystic duct is most often the cause of sudden

- a) nephritis
- b) cholecystitis
- c) colitis
- d) gastritis

4. Gastroesophageal reflux disease is the abnormal ... of the lower esophageal sphincter.

- a) absence
- b) relaxation
- c) reduction
- d) widening

5. How does hydrochloric acid aid in digestion?

- a) It neutralizes acid from the stomach.
- b) It combines with pepsinogen to make pepsin which breaks down proteins in chemical digestion to prepare for absorption.
- c) It breaks down fats to smaller particles in chemical digestion to prepare for absorption.
- d) It breaks down carbohydrates into smaller molecular chains in chemical digestion to prepare for absorption.

EXERCISE 4. Read the following Case History and answer the question.

A 68-year-old man has a 6-week history of epigastric discomfort that is not relieved with over-the-counter antacids. He does not have fever, heartburn, jaundice, or change in bowel habits but believes that his clothes are becoming loose, although he has not weighed himself recently. The patient has an 11-year

history of hypertension, treated with a thiazide diuretic, and a several-month history of type 2 diabetes mellitus, treated with an oral hypoglycemic agent. He also takes a statin and low-dose aspirin. Physical examination reveals a thin, elderly man who appears uncomfortable. Vital signs and abdominal examination are normal. There is no scleral icterus. Laboratory Studies Hemoglobin 11.7 g/dL Glucose 143 mg/dL Total bilirubin 2.6 mg/dl Aspartate aminotransferase 35 U/L Alanine aminotransferase 49 U/L Alkaline phosphatase 345 U/L Amylase 135 U/L.

Which of the following diagnostic studies is most appropriate at this time?

- a) Endoscopic retrograde cholangiopancreatography
- b) Endoscopic ultrasonography
- c) Helical CT scan of the abdomen
- d) Mesenteric angiography

EXERCISE 5. Write short Case History, using the example on pages 9-10.

EXERCISE 6. Translate the following sentences into English.

1. Для успішного лікування захворювань травної системи пацієнт повинен дотримуватися всіх приписів лікаря і режиму харчування.
2. Травна система людини є складною структурою, яка шляхом хімічних перетворень перетворює звичну всім їжу в ряд сполук, які легко засвоюються організмом.
3. Шлунок людини – травний орган, що знаходиться між дванадцятипалою кишкою і стравоходом.
4. Результативність медикаментозного методу лікування захворювань шлунка, в більшості випадків, вкрай висока.
5. Щорічно 29 травня відзначається Всесвітній день здорового травлення.

6. Стінки шлунка людини складаються з чотирьох оболонок. Внутрішня слизова оболонка виділяє шлунковий сік та інші ферменти.
7. Характер захворювання може бути як вродженим, так і набутиим.
8. Лікарь-гастроентеролог встановив точний діагноз на основі результатів діагностики і призначив ефективне лікування.
9. Основним клінічним проявом ураження стравоходу при хворобі Шегрена є дисфагія, яка реєструється у $\frac{2}{3}$ хворих і характеризується неможливістю вживання сухої їжі без води.
10. Запалення товстої кишки може спостерігатись при хворобі Крона та неспецифічному виразковому коліті.

Case History II.

Acute Pancreatitis Secondary to Duodenoduodenal Intussusception in Duodenal Adenoma

Task 1. Read and translate the case history. Pay attention to the terms and phrases in bold.

GENERAL INFORMATION:

First name, patronymic, surname: Boyka Todorova Daskalova-Petrova

Age: 31

Sex: female

Nationality: Bulgarian

Education: secondary

Marital status: married

Home address: 38 Madara, Shumen, Bulgaria

Profession: shop assistant

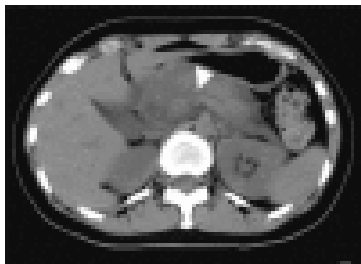
CASE REPORT:

A 31-year-old female had endured recurrent **intermittent abdominal pain** for 2 years. She had been admitted to a local hospital 2 months previously and acute pancreatitis was indicated based on elevated **amylase levels** (492 IU/l, normal range 37–160 IU/l). All other blood chemistry parameters including **bilirubin** were within normal limits. One month later, she was admitted to the same hospital for recurrent abdominal pain and referred to us for more detailed **assessment**.

CT examination at the previous hospital had revealed a diffusely swollen pancreas along with slightly dilated main pancreatic duct (fig.1). The upper abdomen was not tender. Contrast-**enhanced** CT revealed no diffuse swelling of

the pancreas and no dilation of the main pancreatic duct. However, a ‘target’ appearing in a region of the duodenum confirmed a diagnosis of duodenoduodenal **intussusception** (fig. 2). The stomach was not distended and the common bile duct was not dilated. Upper gastrointestinal **endoscopy** revealed an elevated 3-cm tumor near the **ampulla of Vater** in the second part of the duodenum (fig. 3a). **Biopsies** from the tumor confirmed that the tumor was an adenoma. Gastroduodenography revealed an elevated lesion in the second part of the duodenum. Upper gastrointestinal endoscopy and upper gastroduodenography showed no obstruction. Endoscopic ultrasonography showed the 31-mm low-echoic and well-vascularized tumor originating from the mucosa (fig. 3b). We diagnosed duodenoduodenal intussusception caused by this tumor acting as the lead point.

Figure 1



CT image from a previous hospital shows diffusely swollen pancreas and slightly dilated main pancreatic duct (arrowhead).

Figure 2

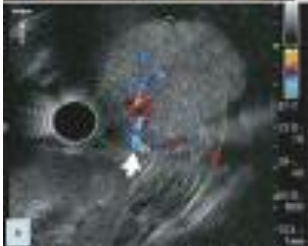


Subsequent contrast-enhanced abdominal CT shows ‘target’ appearance in the region of the duodenum confirming the diagnosis of duodenoduodenal intussusception).

Figure 3



Upper gastrointestinal endoscopy findings show an elevated red and finely granular lesion from the oral side of the ampulla of Vater (arrowhead).



Endoscopic ultrasonography shows a highly vascularized tumor originating from the mucosa

Endoscopic mucosal **resection** of the tumor was initially planned, but the tumor was highly vascularized and thus the risk of bleeding was high. Therefore we planned to resect the duodenal adenoma via **laparotomy**. **An incision** of about 10 cm was made on the upper abdomen. We performed **Kocher's maneuver** and detected a mass inside the second part of the duodenum. The anterior wall of the second part of the duodenum was cut and the tumor was resected from the submucosal layer. The anterior wall of the duodenum was closed using **Gambee's method**. The postoperative course was uneventful. Enteral feeding was started on the fourth postoperative day and the patient was discharged on the twelfth postoperative day. Histology confirmed a 40 × 33 × 26 mm tubulovillous adenoma with foci of severe dysplasia but no malignancy.

VOCABULARY

Intermittent abdominal pain	 ,intə'mit(ə)nt æb'dɒmɪn(ə)l	an unpleasant feeling occurring as a result of injury or disease, localized in abdomen alternately ceasing and beginning again
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Amylase level	'æmɪleɪz 'lev(ə)l	the concentration of enzyme in the blood that is responsible for catalyzing of the hydrolysis of starch to sugar for producing carbohydrate derivatives
Bilirubin	'bɪlɪ'ruːbɪn	a yellow-red hemoglobin-breakdown product. It is present in bile transported from the liver to the gallbladder
Assessment	ə'sesmənt	the act of making a decision or a judgment about patient's condition
Enhanced	ɪn'hɑːnst	raised to a higher degree
An intussusception	'ɪntəsə'sepʃ(ə)n	a medical condition in which a part of the intestine folds into another section of it (similar to the way the parts of a collapsible telescope retract into one another). This can often result in an obstruction
Endoscopy	'endɒskɒpiː	examination of the inside of the body by using a lighted, flexible instrument called an endoscope
The ampulla of Vater	æm'pʊlə	a small dilatation in the major duodenal papilla which corresponds to the joining of the common bile duct and major pancreatic duct. It is also known as the hepatopancreatic ampulla or the hepatopancreatic duct
Biopsy	'baɪpsɪ	the removal and examination of tissue, cells, or fluids from someone's body in order to check

		for illness
'target' appearance	'tɑ:ɡɪt' ə'pɪ(ə)rəns	a red center, a surrounding area
Resection	rɪ'sekʃ(ə)n	surgical removal of all or part of an organ, tissue, or structure
Incision	ɪn'sɪʒ(ə)n	a cut made into the body during surgery
Kocher's maneuver		a surgical manoeuvre to expose structures in the retroperitoneum behind the duodenum and pancreas; for example to control hemorrhage from the inferior vena cava or aorta, or to facilitate removal of a pancreatic tumour. It is named for the Nobel prize-winning surgeon Dr. Emil Theodor Kocher
Laparotomy (Celiotomy)	ˌlæpə'rɒtəmi	a surgical procedure involving a large incision through the abdominal wall to gain access into the abdominal cavity
Gambee's method	'meθəd	a good and safe operative technique for cervical esophagogastronomy

EXERCISES

EXERCISE 1. Translate into your native language the following words and word combinations from the case history. Make up your own sentences with them.

Recurrent intermittent abdominal pain, elevated amylase levels, blood chemistry parameters, detailed assessment, a diffusely swollen pancreas, dilation of the main pancreatic duct, in a region of the duodenum, a 'target' appearance, mucosal resection of the tumor, an incision of about 10 cm.

EXERCISE 2. Choose the right term.

A bilirubin, an intussusception, amylase, absorption, the mucosa, endoscopy, inflammation, bleeding, biopsy, ultrasonography

1. Segmentation helps to increase the _____ of nutrients by mixing food and increasing its contact with the walls of the intestine.
2. A liver _____ is a surgical procedure to remove a small sample of liver tissue for examination under a microscope.
3. _____ test is used to detect an increased level in the blood. It may be used to help determine the cause of jaundice and/or help diagnose conditions such as liver disease.
4. There are various causes of _____ and sometimes the biopsy can identify particular cells that occur with specific types of inflammation, hemolytic anemia, and blockage of the bile ducts.
5. Upper gastrointestinal _____ is a procedure that enables a gastroenterologist to examine the esophagus, stomach, and duodenum using a thin, flexible tube called the upper endoscope through which the lining of the esophagus, stomach, and duodenum can be viewed using a TV monitor.
6. _____ is a medical condition in which a part of the intestine folds into another section of intestine, similar to the way the parts of a collapsible telescope retract into one another.

7. The intestinal tract is not easily identified with _____ because air or gas can interfere with the production of ultrasound images.
8. Any damage or inflammation of the pancreas may cause it to produce an abnormal amount of _____, that is a sign of a pancreatic disorder.
9. The submucosal layer is made up of a dense and irregular layer of connective tissue with blood vessels, lymphatics, and nerves branching into _____ and muscular layer.
10. It is clearly known that the risk of _____ is one of the primary complications of anticoagulant therapy.

EXERCISE 3. Choose the correct answers.

1. A 32-year-old woman is admitted with inflammatory bowel syndrome (Crohn's disease). Which therapies should the patient expect to be part of the care plan?
- a) high-protein milkshakes b) lactulose therapy
c) high-fiber diet d) corticosteroid and antidiarrheal therapy
2. Hepatitis C is an inflammation of the liver due to the hepatitis C virus (HCV), which is usually not spread by
- a) blood transfusion b) intravenous drug abuse
c) microbes d) hemodialysis
3. ... is a disorder, which connecting with chronic inflammation of the mucous membrane of the stomach, characterized by disorder of secretion, motility and evacuation of food.
- a) peritonitis b) ascites
c) cholecystitis d) chronic gastritis
4. ... is a viral disease that destroys the liver and bile ducts.
- a) Botkin's disease b) chronic gastritis
c) gastric and duodenal ulcers d) ascites

5. Bowel diversion surgery may be indicated for all of the following conditions except:

- a) Gastroparesis
- b) Cancer
- c) Inflammatory bowel disease
- d) Bowel obstruction

EXERCISE 4. Read the following Case History and answer the question.

A 47-year-old woman is evaluated for a 3-month history of epigastric pain. The pain varies in intensity and is not aggravated by eating; it is not associated with nausea, vomiting, bloating, or weight loss. She started pantoprazole therapy 2 months ago without relief. The patient has a history of resolved peptic ulcer 2 years ago and osteoarthritis of the hands and knees, and her medications are ibuprofen as needed for arthritic pain and pantoprazole. On physical examination, vital signs are normal. There is mild epigastric tenderness, normal bowel sounds, and no hepatomegaly or lymphadenopathy. Complete blood count and serum chemistry tests, including liver enzymes, are normal. Esophagogastroduodenoscopy shows mild erythema and a few superficial erosions throughout the distal stomach and a 1-cm pedunculated polyp in the antrum of the stomach that is biopsied but not removed. Biopsy specimens of the erythematous gastric mucosa show chronic active gastritis and the presence of *Helicobacter pylori*; specimens of the polyp show a tubular adenoma with low-grade dysplasia. Eradication therapy for *Helicobacter pylori* is begun.

Which of the following is the most appropriate additional management of this patient?

- a) Upper gastrointestinal endoscopy
- b) Esophagogastroduodenoscopy with polypectomy now
- c) Surgical resection using Gambee's method
- d) No further intervention

EXERCISE 5. Answer the following questions, using the case history.

1. What pain had Boyka endured for 2 years?
2. What kind of evaluation did the patient need when she referred to the hospital?
3. What conditions of the inner organs were revealed by CT-examination?
4. What surgical procedures and operations were planned?
5. Can you describe the patient's condition during the postoperative course of treatment?

EXERCISE 6. Translate the following sentences into English.

1. Лікар повідомив, що докладне (детальне) оцінювання стану пацієнта буде проведено пізніше.
2. Терапевт завірив нас, що лікування проходить без ускладнень.
3. Хіміотерапія є більш ефективним лікуванням, що підтверджує даний (наданий) діагноз.
4. На 5-й день після резекції кишечника (кішківника) та лапаротомії пацієнт почувається добре (задовільно).
5. Ендоскопія не виявила ніяких порушень у тонкому кишечнику.
6. На 3-й день після операції ви вже зможете прогулятися по коридору відділення у супроводі медсестри.
7. Кишкову непрохідність було виявлено дякуючи обстеженню комп'ютерної томографії.
8. Біопсія печінки дозволяє підтвердити, уточнити, а інколи змінити клінічний діагноз.
9. Згідно з клінічними обстеженнями, злоякісна пухлина рідко локалізується на передній стінці шлунку.
10. Пацієнту необхідно дотримуватися відповідної дієти при загостренні хронічного гастриту.

Case History III.

Protein-Losing Enteropathy in Ulcerative Colitis

Task 1. Read and translate the case history. Pay attention to the terms and phrases in bold.

GENERAL INFORMATION:

Surname, first name: Duff Dylan James

Age: 33

Sex: male

Nationality: Australian

Education: higher

Marital status: single

Home address: Nexus Park, Unit 2A/33 Melbourne NSW 2170, Australia

Profession: developer

CASE REPORT:

The patient, a 33-year-old male, was diagnosed with **ulcerative colitis** 7 years ago at the age of 26 after presenting with 2 weeks of mid-abdominal pain and 5–6 loose **bowel movements** daily that were mixed with mucus and blood. His symptoms improved after 1 month of treatment with **mesalamine** tablets, with a decrease in bowel movements to 1–2 per day without blood or mucus. He was subsequently changed to **balsalazide** and continued on this medication for 4 years with good symptomatic control. The patient's other past medical history was significant only for kidney stones. Both of the patient's parents had diabetes and there was no family history of inflammatory bowel disease. The patient was married and worked in advertising. He used to smoke cigarettes regularly but

stopped smoking a few months **prior** to being diagnosed with UC. He drank alcohol rarely and never used **illicit drugs**. There were no known drug allergies.

The patient was changed to **Asacol** 3 years ago after needing **intermittent courses** of **steroid enemas** for mild UC **flares** characterized by mild diffuse abdominal discomfort and more loosely formed stool mixed with blood. He did not experience another UC flare until last year when he had a more severe UC flare in which he had 3–4 bloody bowel movements a day with moderate to severe abdominal pain and significant fatigue. His condition significantly improved with 40 mg of prednisone daily, which was **tapered off** over the course of 4 months. Between the age of 26 and 33, the patient was never hospitalized and maintained a weight of 170 **pounds**.

His condition deteriorated, however, last year with increased bleeding and frequency of bowel movements. He was constantly fatigued, had 5–6 bloody bowel movements daily, and suffered from frequent diffuse **cramping** pain in the abdomen. His weight decreased to 120 pounds, representing a drop in his **BMI** from 28 to 20, and he was so **debilitated** that he was unable to work. On physical exam, the patient was extremely thin, had diffuse mild to moderate abdominal tenderness and 1+ pedal edema bilaterally. Laboratory testing showed iron deficiency anemia with a hemoglobin of 7.1 g/dl. The patient was again started on oral steroids. **A colonoscopy** at that time revealed **retrograde** progression of the inflammatory process from the rectum to the transverse colon, with development of **pseudopolyps**. There was no evidence of **dysplasia** on multiple biopsies during 2 last years. During this period, his course was complicated by a deep vein thrombosis of the left lower extremity and a pulmonary **embolus** necessitating treatment with **warfarin**. Although the oral steroids **alleviated** his symptoms with resolution of abdominal pain and improvement in frequency of bowel movements to 2–3 daily with only occasional blood, the patient's **serum albumin** fell from 4.0 to 1.2 g/dl.

Repeat colonoscopy revealed improvement of the mucosal disease, with no evidence of dysplasia on biopsy. No inclusion bodies consistent with **CMB colitis** were noted on pathologic evaluation. Stool testing was also negative for *Clostridium difficile* toxin. Even with endoscopic improvement, the patient's serum albumin continued to be <2 g/dl and he was unable to regain weight from his 50 pound weight loss, leading to a diagnosis of PLE. PLE was confirmed by an elevated stool alpha-1-antitrypsin A1AT clearance of 162 ml/24 h, which was greater than 5 times the upper limit of normal of the testing laboratory. He remained severely debilitated and **emaciated** even though his UC symptoms were controlled. Due to his persistent weakness and PLE, the patient underwent a 3-stage restorative **proctocolectomy**, each stage preceded by insertion of a retrievable **vena cava filter** to prevent pulmonary emboli. At the time of surgery the patient's UC regimen consisted of Asacol and mesalamine enemas. He underwent **closure** of his **ileostomy** and construction of a J-pouch 3 months following his initial surgery and quickly regained weight, which he has maintained with a most recent weight of 200 pounds. The patient has returned to a productive life with an albumin of 4.2 g/dl, 4–5 non-bloody bowel movements daily with no leakage, and no further evidence of PLE. Although the last colonoscopy several months prior to the procedure demonstrated improvement of the inflammatory process, the resected colon did demonstrate active UC with ulceration and extensive inflammatory polyposis from the rectum to the cecum, measuring 0.5–3.0 cm in greatest **dimension**, as well as one giant inflammatory polyp . There was no evidence of dysplasia.



Histopathology from the patient's procto-colectomy. a Photograph of gross specimen showing inflammatory polyposis and one giant inflammatory polyp measuring 6.5 × 4.5 × 3.5 cm located 2 cm from the ileocecal valve.

ABBREVIATIONS:

UC - ulcerative colitis

mg - milligrams

BMI - body mass index

l+2 - mm or less (assessment for edema)

g/dl - grams per deciliter

CMV - cytomegalovirus

PLE protein - losing enteropathy

A1AT - alpha-1-antitrypsin

ml/h - milliliter per hour

J-pouch - ileoanal anastomosis surgery

VOCABULARY

Ulcerative colitis	'ʌls(ə)rətɪv kə'laɪtɪs	a bowel disease that is characterized by inflammation with ulcer formation in the lining of colon (large intestine)
Bowel movement	'bʌvəl'mu:vmənt	evacuation of feces from the gastrointestinal tract
Mesalamine		an active metabolite of sulfasalazine, used in prophylaxis and treatment of inflammatory bowel disease
Balsalazide		an anti-inflammatory drug used in the treatment of inflammatory bowel disease

Illicit drug	i'lisit drʌg	a drug which is produced, trafficked and/or consumed without approving by law
Prior to		existing or happening before something else, or before a particular time
Asacol		the name of the drug, containing mesalamine. It is used to prevent the symptoms of ulcerative colitis
Intermittent course	ˌɪntə'mɪt(ə)ntkɔːs	the series of events in a disease incident in a patient
Steroid	'sterɔɪd	one of a large group of chemical substances classified by a specific carbon structure
Enema	'enɪmə	the injection of liquid into the rectum and colon by way of the anus
Flare	fleə	a significant worsening of a disease or its symptoms
Taper off	'teɪpəʊf	to reduce (diminish) gradually of a therapeutic dose, required by a patient over a prolonged period of time, of a particular drug
Cramping	'kræmpɪŋ	a sudden, involuntary, spasmodic muscular contracting that causes severe pain

Pound	paʊnd	a unit of weight equal to 453.592 grams
Body mass index	'bɒdɪmæs'ɪndeks	a measure of body fat that is the ratio of the weight of the body in kilograms to the square of its height in meters
Debilitated	dɪ'bɪlɪteɪtɪd	being in a severely weakened state
Colonoscopy		a medical procedure in which a special tube-shaped instrument is used to take pictures of the inside of someone's colon
Retrograde	'retrəgreɪd	returning to an earlier and usually worse state or condition
Pseudopolyp		a projecting mass of granulation tissue, such as the masses that may develop in ulcerative colitis
Dysplasia	dɪs'pleɪzɪə	abnormal development or growth of tissues, organs, or cells
Pulmonary embolus	'pʌlmən(ə)rɪ'embələs	blood clot that has been carried through the blood into the pulmonary artery or one of its branches, plugging that vessel
Warfarin		an anticoagulant drug taken to prevent the blood from clotting and to

		treat blood clots and overly thick blood
Alleviate	ə'li:vieɪt	to reduce the pain ; to make (something) less painful
Serum albumin	'sɪ(ə)rəm'ælbjʊmɪn	the main serum protein of the blood in humans and other vertebrates, produced in the liver and active in the maintenance of blood osmotic pressure, and in the transport of fatty acids, steroids, and other compounds, including many drugs
Mucosal disease	dɪ'zi:z	a usually fatal form of bovine viral diarrhoea marked especially by high fever, diarrhoea, and ulcers of the digestive tract
CMB colitis	kə'laɪtɪs	an inflammation of the colon, caused by a herpes-type virus
Clostridium difficile toxin	'dɪfɪsɪl'tɒksɪn	a bacterium that can infect the bowel and cause diarrhoea
Emaciated	ɪ'meɪʃieɪtɪd	abnormally thin
Proctocolectomy		surgical removal of the rectum and all or part of the colon

Vena cava filter	'vi:nəcava'filtə	a device inserted into a major vein to prevent a blood clot from entering the lungs
Closure	'kləʊzə	the surgical closing of a wound by suture or staple
Ileostomy		an artificial opening created in the ileum and brought to the surface of the abdomen for the purpose of evacuating feces
Dimension	d(a)ɪ'menʃ(ə)n	a measurement of the size of something in a particular direction, such as the length, width, height or smth. else

EXERCISES

EXERCISE 1. Choose the right term.

Cramping, albumin, retrograde, inferior vena cava filters, BMI, dysplasia, emaciated, the transverse colon, closure, illicit drugs

1. Many _____ include things like cocaine, amphetamines, heroin, and hallucinogens. They are highly addictive and pose serious health risks, even when taken in small doses.
2. The _____ muscle should be carefully stretched and massaged to relieve pain.
3. _____ is a person's weight in kilograms (kg) divided by his or her height in meters squared.

4. _____ is the central portion of the large intestine, crossing the abdominal cavity from right to left and lying between the ascending and descending colons.
5. The presence of _____ in the urine (albuminuria) indicates malfunction of the kidney, and may accompany kidney disease or heart failure.
6. A post mortem examination found she was _____ and her stomach had a number of items of non-food material, suggesting she had been scavenging for food.
7. With the increasing ease of insertion of filters and the possibility of removal, _____ are increasingly being placed for prophylactic reasons in patients deemed at high risk for developing a venous thrombus.
8. Carcinomas of the head and neck are often associated with multiple areas of _____ or carcinoma in situ (CIS) in noncontiguous mucosa, as well as with the development of second primary cancers of the aerodigestive tract.
9. Because of a brain injury, the patient has _____ amnesia and cannot remember anything that happened in the past.
10. Spanish physicians were shocked by the _____ one of the big Barcelona medical research laboratory and wanted government incentives to prevent more.

EXERCISE 2. Imagine you are a gastroenterologist. Your patient has been suffering from achalasia pain for 3 months. How could you answer the following patient's questions?

1. Do I need any special health screenings (colonoscopy, endoscopy, etc.)?
2. What is happening with my body when I experience a flare-up? How can I avoid flare-ups?
3. What are my treatment options, and which do you recommend?
4. Can you explain the benefits and side effects of the different types of treatments? How long does it take for treatment to begin working?

5. What types of lifestyle and dietary changes are helpful to manage my condition during and after treatment?
6. Should I avoid any over-the-counter medications, like antacids or aspirin, during treatment?
7. Is my stress level making my health condition worse?
8. Should I see any other health professionals, such as a nutritionist or dietitian, in coordination with you? If so, can you recommend one to me?
9. When should I come back for a follow-up appointment?
10. Does my condition increase my risk for developing any other medical problems?

EXERCISE 3. Choose the correct answers.

1. ... is an inflammation of the liver, caused by a virus or a toxin and characterized by jaundice, liver enlargement, and fever.
 - a) pyelonephritis
 - b) pyelocystitis
 - c) chronic gastritis
 - d) hepatitis
2. It occurs when bile becomes trapped in the gallbladder. This often happens because a gallstone blocks the cystic duct. This is the tube that bile travels into and out of the gallbladder. When a stone blocks this duct, bile builds up, causing irritation and pressure in the gallbladder. What is this?
 - a) pyelocystitis
 - b) Botkin's disease
 - c) gastric ulcer
 - d) cholecystitis
3. ... is a yellowish pigmentation of the skin, the conjunctive membranes over the sclera (whites of the eyes), and other mucous membranes caused by high blood bilirubin levels, which subsequently causes increased levels of bilirubin in the extracellular fluid.
 - a) peritonitis
 - b) pyelonephritis
 - c) jaundice
 - d) gastric and duodenal ulcers

4. ... is a vital organ of vertebrates located in the upper right quadrant of the abdomen, below the diaphragm, has a wide range of functions, including detoxification of various metabolites, protein synthesis, and the production of biochemical necessary for digestion.

- a) intestine
- b) liver
- c) gallbladder
- d) stomach

5. Abdominal pain associated with appendicitis is generally described as:

- a) near the diaphragm
- b) relieved by eating
- c) near or around the umbilicus and in the right lower quadrant of the abdomen
- d) worse in the morning

EXERCISE 4. Read the following Case History and answer the question.

An 77-year-old woman is evaluated for a 2-month history of abdominal and back pain. She also has anorexia and has lost 8 kg. For the past 3 weeks she has had progressive pruritus and a yellow tint to her skin. On physical examination, the patient appears ill; the temperature is 37.4 °C, the blood pressure is 107/64 mm Hg, the pulse rate is 97/min, and the respiration rate is 15/min. There is scleral icterus, jaundiced skin, and generalized abdominal tenderness. Laboratory studies reveal a leukocyte count of 13,200/ μ L (13.2×10^9 /L), total bilirubin 12.4 mg/dL (212 μ mol/L), alkaline phosphatase 748 U/L, and CA 19-9 822 U/L. CT scan shows a 3.1-cm lesion in the head of the pancreas with dilation of the pancreatic and bile ducts and multiple lesions throughout the liver that are consistent with metastases. Endoscopic ultrasonography biopsy specimen of the mass is positive for adenocarcinoma.

Which of the following is the most appropriate next step in the management of this patient?

- a) Biopsy of a liver lesion
- b) Placement of a metal biliary stent

- c) Treatment with warfarin
- d) Surgical resection of the pancreatic lesion

EXERCISE 5. Write short Case History, using the example on pages 9-10.

EXERCISE 6. Translate the following sentences into English.

1. Хвороба Крона характеризується переймоподібними болями в області живота, діареєю, запаленням заднього проходу та іншими симптомами, наслідком яких також може бути і різка втрата ваги.
2. При огляді гастроентерологом пацієнт скаржився на біль в області живота, нудоту, блювоту та пронос.
3. Однією з важливих причин втрати ваги є рак.
4. Чистий язик, «чиста» відрижка, свіжий подих, нормальне формування та своєчасна евакуація калу та сечі (своєчасне випорожнення) – це основні симптоми правильного травлення.
5. Лікар сказав, що порушення роботи кишечника пояснюється індивідуальними особливостями організму пацієнта.
6. Стан пацієнта погіршився 2 місяці тому, коли з явилися болі інтенсивного характеру в епігастральній області.
7. При прийомі в гастроентерологічне відділення пацієнтка скаржилася на ниючі болі в лівому підребер'ї, не пов'язані з прийомом їжі.
8. Зміна якісного та/або кількісного складу мікроорганізмів у кишечнику називається дисбактеріозом, що є наслідком низки захворювань.
9. Тільки в 1983 році австралійські вчені Маршалл і Уоррен виділили з шлунка бактерію Хелікобактерпілори (*Helicobacterpilori*), що викликає виникнення гастриту.
10. Внаслідок діареї відбувається подразнення слизової оболонки ануса, спостерігається спазм сфінктера і з'являється відчуття болю в прямій кишці.

Case History IV.

Ectopic Sebaceous Glands in the Esophagus: Endoscopic Findings over Three Years

Task 1. Read and translate the case history. Pay attention to the terms and phrases in bold.

GENERAL INFORMATION:

Surname, first name: Fukui Hideki

Age : 56

Sex: male

Nationality: Japanese

Education: secondary

Marital status: married

Home address: 379 Konoyama, Abiko-shi, Chiba-ken, Japan 270-1145

Profession: firefighter

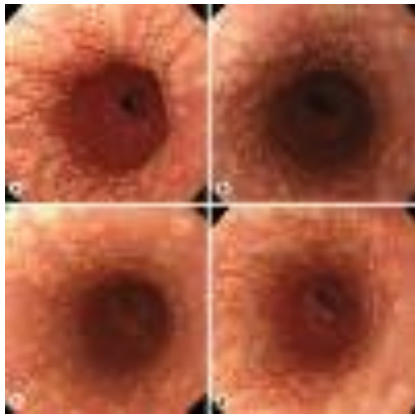
CASE REPORT:

An **asymptomatic** 56-year-old Japanese man visited hospital in May 2008 for a routine medical examination, including upper gastrointestinal endoscopy. He had no **obvious** clinical signs and symptoms. He was a smoker and a social drinker. Blood tests showed a slightly elevated total **cholesterol** level of 263 mg/dl, although other tests were within normal limits. He performed a diet cure because of mild **hyperlipidemia**.

Endoscopic examination revealed more than 100 yellowish plaques 1–20 mm in diameter **scattered** over the mucosal surface of the middle and lower thoracic esophagus (fig.1a). The smaller lesions had a fine, granular appearance and the larger lesions had lobulated **margins**, giving them a flower-like appearance. Biopsy **specimens stained** with H&E showed sebaceous glands

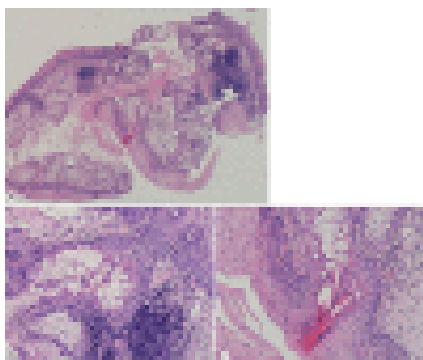
associated with lymphocytic **infiltration** and an **excretory duct**, and overlying **squamous** epithelium (fig.2). No evidence of hair **follicles** or **malignancy** was noted.

Figure 1



Endoscopic examination. a First endoscopic examination: More than 100 yellowish plaques measuring 1–20 mm in diameter were seen in the middle and lower thoracic esophagus. The lobulated flower-like lesions were scattered over the mucosal surface.

Figure 2



Microscopic examination. a Squamous epithelium overlying the sebaceous glands (H&E, ×10). b Lymphocytic infiltration is seen around the sebaceous glands (H&E, ×100). c The excretory duct of a sebaceous gland.

Repeat endoscopic examination at 1 and 2 years revealed that the lesions had decrease slightly in size or number compared with the first examination (fig. 1b, c). Sebaceous glands were still **detectable** on biopsy specimens. Endoscopic examination at 3 years revealed that the lesions had increased slightly in size or number compared with the preceding two examinations, **to resemble** the first endoscopy (fig.1d). Overall, there were no significant changes in endoscopy findings over the 3 years. The patient continues to be **followed up** without treatment.

ABBREVIATIONS:

mg/dl - milligrams per deciliter (100 milliliters)

mm - millimeter(s)

H&E - hematoxylin-eosin

VOCABULARY

Asymptomatic	,eisɪmptə'mætɪk	showing no symptoms or signs of a disease or disorder
Obvious	'ɒbvɪəs	easily seen, recognized, or understood
Hyperlipidemia		elevated concentrations of any or all of the lipids in the blood
Scattered	'skætəd	separated and gone in different directions
Margin	'mɑ:dʒɪn	the outside limit or edge of a bodily part or a wound
Specimen	'spesɪmən	a small individual part of body material obtained for testing
Stain	steɪn	to discolor, to dye
Sebaceous glands	sɪ'beɪfəsɡlændz	microscopic exocrine glands in the skin that secrete an oily or waxy matter, called sebum, to lubricate and waterproof the skin and hair of mammals

Infiltration	,ɪnfɪl'treɪʃ(ə)n	the pathological accumulation in tissue or cells of substances not normal to them or in amounts in excess of the normal
Excretory duct	ɪk'skri:t(ə)rɪdʌkt	a duct through which the secretion is conveyed from a gland
Squamous epithelium	'skweɪməs, epɪ'thi:lɪəm	consisting of one or more cell layers, the most superficial of which is composed of flat, scale-like or plate-like cells
Hair follicle	heə'fɒlɪk(ə)l	a sac from which a hair grows and into which the sebaceous (oil) glands open
Malignancy	mə'lıgnənsɪ	the tendency of a medical condition to become progressively worse
Detectable	dɪ'tektəbl	noticeable; discoverable
Resemble	rɪ'zemb(ə)l	to be like or similar to
Follow up	'fɒləʊʌp	to monitor a patient's condition after a period of active treatment

EXERCISE 1. Choose the right term.

Stained, the lesions, resembles, specimen, detectable, obvious, lobulated, malignancy, hair follicle, cholesterol

1. The treatment of elevated _____ involves not only diet but also weight loss, regular exercise, and medications.

2. Microscopic examination showed a _____, well-circumscribed lesion, with a thick fibrotic margin but no true capsule.
3. The suberized and cuticularized cell-walls appear to contain a fatty body called suberin, and such cell-walls can be _____ red by a solution of alcanin, the lignified and cellulose membranes remaining unstained.
4. The human _____ is a dynamic structure that generates hair through a complex and exquisitely regulated cycle of growth and remodelling governed by numerous genes.
5. The term "_____" refers to cancerous cells that have the ability to spread to other sites in the body (metastasize) or to invade nearby (locally) and destroy tissues.
6. Doctors say the disease is probably inherited but not _____ at birth.
7. The substance that human blood _____ most closely in terms of chemical composition is sea water.
8. The laboratory found evidence of parasites in the patient's stool _____.
9. In all such cases there is seen a selective character in the distribution of _____, some organs being in any disease much more liable to infection than others.
10. One of the very _____ sign of liver problems is that your urine and fecal matter looks very out of the ordinary.

EXERCISE 2. Match the words with their synonyms and antonyms. Some words may have two correct variants.

NOTE! *There are NO extra words in lists of synonyms and antonyms.*

Routine, obvious, normal, mild, slight, significant

Synonyms: Serious, benign, typical, ordinary, evident, weak, marginal, visible, regular

Antonyms: Unimportant, considerable, extraordinary, unusual, irregular, hidden, invisible, rare, severe, trivial

EXERCISE 3. Choose the correct answers.

1. A 69-year-old man seeks help for chronic constipation. This is a common problem for elderly clients due to several factors related to aging. Which is one such factor?

- a) increased intestinal motility
- b) decreased abdominal strength
- c) increased gastric acid production
- d) hyperactive bowel sounds

2. Late-stage chronic liver disease is called

- a) hepatitis
- b) cirrhosis
- c) cholecystitis
- d) liver cancer

3. ... is the inflammation of the gallbladder, usually associated with gallstones blocking the flow of the digestive fluid bile.

- a) Hepatitis
- b) Gallbladder carcinoma
- c) Cholecystitis
- d) Liver cancer

4. Dryness of the mouth, ... are the characteristic clinical manifestations of acute cholecystitis.

- a) diarrhea and blood discharge
- b) irritation and tenderness
- c) retention of urine and constipation
- d) vomiting, nausea and constipation

5. Which of the following symptoms is not associated with dyspepsia?

- a) feeling overly full after a normal meal
- b) mild to severe epigastric pain
- c) black tarry stools
- d) epigastric burning sensations

EXERCISE 4. Read the following Case History and answer the question.

A 43-year-old man is evaluated for a 4-month history of left upper quadrant abdominal pain that has slowly increased in intensity and is worse on deep inspiration. The patient is otherwise well, and his only medication is an oral contraceptive pill that he has taken for 10 years. He drinks alcohol socially but has no history of heavy alcohol use, injection drug use, or blood transfusion. On physical examination, vital signs are normal; BMI is 27. There is slight

hepatomegaly with mild discomfort on deep palpation in the left upper quadrant and mid-epigastrium. There is no jaundice or ascites. The lungs are clear. Complete blood count and serum biochemistry studies, including aminotransferases, bilirubin, and α -fetoprotein, are normal. Ultrasonography shows a solitary hyperechoic 8-cm lesion in the left lobe of the liver. CT scan shows a well-demarcated lesion with peripheral enhancement after injection of intravenous contrast; there is no central scar. Liver biopsy specimen reveals sheets of hepatocytes, with no bile ducts or Kupffer cells.

Which of the following is the most likely diagnosis?

- a) Peptic ulcer disease
- b) Hepatic adenoma
- c) Isolated Polyp of the Colon
- d) Simple hepatic cyst

EXERCISE 5. Write short Case History, using the example on pages 9-10.

EXERCISE 6. Translate the following sentences into English.

1. Пацієнт відмітив, що біль був недовгим і проходив після прийому 2-х таблеток (пігулок) нош-пи або однієї таблетки бускопана.
2. Стан здоров'я хворого може ускладнюватися (погіршуватися) тяжкими симптомами побічних ефектів цього препарату.
3. Пальпація дозволяє виявити зону хворобливого відчуття, її точне розташування, іноді визначити навіть пухлину черевної порожнини, збільшені печінку та селезінку.
4. Оглядова рентгенограма черевної порожнини виявила, що газ присутній в шлунку і ободовій кишці, а не в тонкій кишці (а не в тонкому кишечнику).
5. Переїдання жирної їжі і зловживання алкоголем є найбільш частими причинами виникнення гострого панкреатиту (запалення підшлункової залози).

6. Для виявлення закидання (попадання) шлункового вмісту в стравохід необхідні певні діагностичні дослідження.
7. Дослідження вмісту шлунка за допомогою зонда застосовується для вивчення стану його функцій.
8. На підставі даних лабораторних досліджень було підтверджено первинний діагноз – хронічний панкреатит.
9. Відомо, що мікрофлора кишечника на 92-95% складається з анаеробних бактерій.
10. Класичною «хворобою студентів» вважається гастрит – запалення слизової (внутрішньої) оболонки шлунка.

Case HISTORY V.

An Isolated Neurofibromal Polyp of the Colon

Task 1. Read and translate the case history. Pay attention to the terms and phrases in bold.

GENERAL INFORMATION:

First name, surname: Felix Alberto Gonzalez Rivas

Age: 59

Sex: male

Nationality: Venezuelan

Education: secondary

Marital status: widower

Home address: Av. Orinoco, Torre Uno, Piso 12, Las Mercedes, Caracas, Venezuela

Profession: retired

CASE REPORT:

A 59-year-old man with a history of controlled **dyslipidemia**, hypertension, depression, **benign** prostatic hyperplasia, erosive gastritis, chronic pain syndrome and **degenerative joint disease** presented for a routine screening colonoscopy. His medical history was also significant for bilateral **hydroceles** and one previous hospitalization 6 years before for **CAP**. His medications included aspirin 81 mg daily, finasteride 5 mg daily, risperidone 6 mg daily, trazedone 100 mg daily, fluoxetine 40 mg daily, hydrochlorothiazide 25 mg daily, omeprazole 20 mg daily, and tramadol 50 mg three times per day. He did not have any significant history of abdominal pain or **bloating**, diarrhea or **constipation**, or any **melena** or **hematochezia**. The patient denied any recent episodes of fevers, chills, **nausea**, or

vomiting. He reported a stable appetite and weight. He had no history of alcohol, smoking, or **drug abuse**. His family history did not include any neurofibromatosis or any gastrointestinal **malignancies**. Physical examination of the head, neck, lungs, heart, skin and other systems did not reveal any significant findings. Ophthalmological examination revealed no **Lisch nodules**. Laboratory examinations, including a complete blood count, metabolic panel, hepatic panel and coagulation tests were all within normal limits.

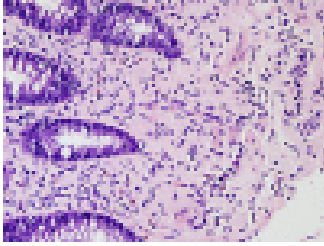
On colonoscopic examination, a 3 mm polyp was found in the **transverse colon** (fig. 1) and another 4 mm polyp in the **descending colon**; both were biopsied. The **remainder** of the colonoscopy did not reveal any additional abnormal macroscopic pathology. Histological examination of the descending colonic polyp revealed findings **consistent** with a **tubular** adenoma; however, multiple levels of the 3 mm transverse colon polyp revealed interlacing **bundles of spindle cells** extending into the **lamina propria** with comma-shaped nuclei consistent with findings seen in neurofibroma (fig. 2). Subsequent **immunohistochemical** stains were performed on the specimen, which disclosed that S100 was expressed in the majority of the cell nuclei, also **compatible with** neurofibroma. CD117 **staining** was performed twice but had to be voided because of tissue loss.

Figure 1



Photograph of a 3 mm polyp of the transverse colon, found on biopsy to be a neurofibroma.

Figure 2



Photomicrograph of a transverse colon polyp. A high-power field showed interlacing bundles of spindle cells, with comma-shaped nuclei, extending into the lamina propria, consistent with findings of a neurofibroma. Staining was positive for nuclear S100.

ABBREVIATION

CAP - community-acquired pneumonia

mg - milligram

VOCABULARY

Dyslipidemia		a disorder of lipoprotein metabolism, including lipoprotein overproduction or deficiency
Benign	bɪ'naɪn	condition, disorder, or growth that is not cancerous or harmful and, therefore, not an immediate cause for concern
Degenerative joint disease	dɪ'dʒen(ə)rətɪv dʒɔɪnt dɪ'zi:z	also known as osteoarthritis, this type of arthritis is caused by inflammation, breakdown and eventual loss of the cartilage of the joints
Hydrocele	'haɪdrəʊsi:l	an accumulation of serous fluid in a sacculated cavity (as the scrotum)
Community-Acquired	nju:'mæʊnɪ	pneumonia that a person acquires outside of a hospital or other health

Pneumonia (CAP)		care institution and that arising in the general population
Bloating	bləʊtɪŋ	a process of abdominal distention from swallowed air or intestinal gas from fermentation
Constipation	ˌkɒnstɪˈpeɪʃ(ə)n	is an acute or chronic condition in which bowel movements occur less often than usual or consist of hard, dry stools that are painful or difficult to pass
Melena	mɪˈli:nə	abnormal black tarry stool that has a distinctive odor and contains digested blood
Hematochezia		bright red blood in the stool, usually from the lower gastrointestinal tract - the colon or rectum - or from hemorrhoids
Nausea	ˈnɔːziə	an unpleasant sensation vaguely referred to the epigastrium and abdomen, with a tendency to vomit
Vomiting	ˈvɒmɪtɪŋ	an act or instance of disgorging the contents of the stomach through the mouth
Drug abuse	drʌgəˈbjuːs	use of a drug, whether over the counter or prescription, for purposes other than those prescribed on the

		product label, often for recreational reasons
Malignancy	mə'liŋnənsɪ	a tumor that is cancerous and growing
Lisch nodules	'nɒdju:lz	a pigmented hamartomatous nodular aggregate of dendritic melanocytes affecting the iris, named after Austrian ophthalmologist Karl Lisch (1907–1999), who first recognized them in 1937
Transverse colon	trænz'vɜ:s'kəvlən	the part of the colon that lies across the upper part of the abdominal cavity
Descending colon	dɪ'sendɪŋ'kəvlən	the segment of the colon that extends from the end of the transverse colon at the splenic flexure on the left side of the abdomen down to the beginning of the sigmoid colon in the pelvis
Remainder	rɪ'meɪndə	something that left over after other parts have been taken away
Consistent with	kən'sɪst(ə)ntwɪð	clinical decision making a phrase used by practitioners of the 'visual arts' of medicine, i.e. pathology and radiology, in which a diagnosis is based on a subjective interpretation of a particular pattern in a tissue, organ, or body region

Tubular adenoma	'tju:bjʊlə ,ædə'nəʊmə	dysplastic polyp of the colonic mucosa that is considered a potential precursor of adenocarcinoma
Bundle	'bʌndl	a collection of fibers or strands, as of muscle fibers, or a fasciculus or band of nerve fibers
Spindle cell	'spɪndl̩sel	any of various cells that are shaped like spindles, being more or less round in the middle with two ends that are pointed
Lamina propria	'læmɪnə	a thin vascular layer of connective tissue underlying the epithelium of a mucous membrane
Immunohistochemical		denoting the application of antigen - antibody interactions to histochemical techniques, as in the use of immunofluorescence
Staining	'steɪnɪŋ	artificial coloration of a substance to facilitate examination of tissues, microorganisms, or other cells under the microscope
Interlacing	ˌɪntə'leɪsɪŋ	linked or locked closely together as by dovetailing

EXERCISE 1. Make up and translate the word combinations, using nouns from the left column and adjectives from the right one.

1. Normal	a) pneumonia
2. Histological	b) examination
3. Abdominal	c) pain
4. Descending	d) findings
5. Community-acquired	e) limits
6. Significant	f) hydroceles
7. Bilateral	g) colon

EXERCISE 2. Choose the right term.

Voiding, laboratory examinations, extending into, colonoscope, nausea

1. Your doctor may order some _____ for you as a part of a routine check-up or to confirm a diagnosis.
2. A technique of bladder training in which the patient is instructed to urinate according to predetermined schedule is called _____.
3. A lot of patients experience _____ after eating spoiled food or foods to which they are allergic.
4. A small video camera is attached to the _____ so that your doctor can take pictures or video of the large intestine (colon).
5. There is a large intracerebral haematoma arising in the left side of the liver tissue and _____ the whole organ.

EXERCISE 3. Choose the right answer:

1. ... is inflammation of the appendix commonly presents with right iliac fossa abdominal pain, nausea, vomiting, and decreased appetite. However, one third to a half of persons do not have these typical signs and symptoms.

- a) appendicitis
- b) chronic gastritis
- c) gastric and duodenal ulcers
- d) peritonitis

2. Ultrasound may show such some signs of ... as gallstones, thickening of gallbladder, extra fluid and others.

- a) cholecystitis
- b) incontinence
- c) pancreatitis
- d) cholangiocarcinoma

3. Jaundice most often occurs as a result of an underlying disorder that either causes tissues to become over-saturated with ... or prevents the liver from disposing of bilirubin.

- a) biliverdin
- b) urobilin
- c) urobilinogen
- d) bilirubin

4. The ... makes substances which help prevent bleeding; when ... damage occurs, these substances are no longer present and severe bleeding can occur.

- a) duodenum
- b) stomach
- c) pancreas
- d) liver

5. The liver is located in the abdomen and performs many functions. Which of the following is NOT a function of the liver?

- a) Storing food
- b) Healing itself when it is damaged
- c) Manufacturing insulin
- d) Producing digestive juices

EXERCISE 4. Read the following Case History and answer the question.

A 57-year-old man presents with vague epigastric “gnawing” discomfort that occasionally awakens him from sleep. There has been no melena, hematochezia, fever, chills or weight loss. Past medical history includes asthma, a TI, and peptic ulcer disease many years prior. Medications are aspirin and beclomethasone

inhaler. Palpation reveals a soft abdomen, mildly tender in the epigastrium. A recent abdominal ultrasound is normal.

What is the best initial test in the evaluation of this patient?

- a) Upper gastrointestinal series
- b) Upper endoscopy
- c) colonoscopic examination
- d) Thoracic CT

EXERCISE 5. Imagine you are a gastroenterologist. Discuss the following questions about your patient's (female) abdominal pain.

You: What type of pain are you experiencing? Is the pain throughout your abdomen or is it confined to a particular area?

P.: ...

You: Where in your abdomen does the pain seem to be located?

P.: ...

You: What type of pain are you experiencing? Is it stabbing and severe? Is it a dull ache?

P.: ...

You: When does the pain occur? Always? More often in the morning or at night? If the pain comes and goes, about how long does it last each time? Does it occur after eating certain types of foods or after drinking alcohol? During menstruation?

P.:...

You: How long have you had this pain?

P.: ...

You: Does the pain also radiate into your lower back, shoulder, groin, or buttocks?

P.: ...

You: Are you currently taking any medications or herbal supplements?

P.: ...

You: Are you pregnant?

P.:

You: Does any activity such as eating or lying on one side relieve the pain?

P:...

You: Have you been injured recently?

P.: ...

You: Well... It is clear to me that you have to undergo some tests to help find the cause of your pain...

EXERCISE 6. Translate the following sentences into English.

1. Пацієнті середнього віку призначили лікування трамаadolом за 2 місяці до діагностування тяжкої форми виразкового коліту.
2. Попередній діагноз був поставлений на підставі скарг хворого і даних загального огляду.
3. Пацієнт з клінічною картиною шлунково-кишкової кровотечі поступив у відділення інтенсивної терапії на третю добу після початку захворювання.
4. Блювота може спостерігатися при будь-якій гострій формі захворювання шлунково-кишкового тракту, включаючи непрохідність кишківника (кишечника).
5. Велика кількість людей страждає від геморою, який може бути одним із наслідків неправильного спорожнення (випорожнення) кишечника.
6. На першій стадії гострого запального процесу вірусних гепатитів під дією клітинних ферментів відбувається руйнування клітинної структури основної тканини печінки.
7. Вважають, що іноді гикавка є наслідком розвитку абсцесу або пухлини в області грудної клітки, діафрагми або стравоходу.
8. Лікар (Доктор) пояснив, що скупчення газів викликає відчуття переповнення шлунку.
9. Нудота, що виникає часто, може бути показником таких захворювань травної системи як коліт, виразка, гастроентерит або камені жовчного міхура.
10. Відомо, що багато літніх людей досить часто скаржаться на запори.

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APPENDIX I.

A CASE HISTORY

It's a Mr. Alan Jameson, a 53-year-old carpenter. He is 1.78 meters in height and 68 kilos in weight. He's been an infrequent attender in the past but he came to the hospital complaining of pain in his right leg and in his back. It started about six weeks ago and it's become gradually more severe over the past couple of weeks. The pain wasn't localized. It's been getting to the stage where the pain is waking him up at night, it's been so severe, and he's noticed some tingling in his right foot. He's having difficulty in carrying on with his work. He's also lost three kilos and has become quite depressed. In the past he has suffered from intermittent pain in back. Paracetamol gave some relief but didn't solve the problem completely. He didn't have any problems with health in the past. As the pain he has numbness in his toes on the right foot. An MRI scan of the lumbar spine confirmed that the patient had a prolapsed interverbal disc. The patient was prescribed a maximum of "twenty-four hours" bed rest and with strong painkillers (Dihydrocodeine 30 mg.), he was given some physio to ease his leg and back.

APPENDIX II.

VOCABRUARY

Alleviate	ə'li:vieit	to reduce the pain ; to make (something) less painful
Amylase level	'æmɪleɪz 'lev(ə)l	the concentration of enzyme in the blood that is responsible for catalyzing of the hydrolysis of starch to sugar for producing carbohydrate derivatives
An intussusception	ˌɪntəsə'sepʃ(ə)n	a medical condition in which a part of the intestine folds into another section of it (similar to the way the parts of a collapsible telescope retract into one another). This can often result in an obstruction
Asacol		the name of the drug, containing mesalamine. It is used to prevent the symptoms of ulcerative colitis
Aspiration pneumonia	ˌæspə'reɪʃ(ə)n nju(:)'məʊnjə	a disease, when food, saliva, liquid or vomit is breathed into the lungs or airway leading to the lungs instead of being swallowed into the esophagus and the stomach
Assessment	ə'sesmənt	the act of making a decision or a judgment about patient's condition

Asymptomatic	,eɪsɪmptə'mætɪk	showing no symptoms or signs of a disease or disorder
Balsalazide		an anti-inflammatory drug used in the treatment of inflammatory bowel disease
Benign	bɪ'næn	condition, disorder, or growth that is not cancerous or harmful and, therefore, not an immediate cause for concern
Bilirubin	,bɪlɪ'ruːbɪn	a yellow-red hemoglobin-breakdown product. It is present in bile transported from the liver to the gallbladder
Biopsy	'baɪəpsɪ	the removal and examination of tissue, cells, or fluids from someone's body in order to check for illness
Bloating	bləʊtɪŋ	a process of abdominal distention from swallowed air or intestinal gas from fermentation
Body mass index	'bɒdɪmæs'ɪndeks	a measure of body fat that is the ratio of the weight of the body in kilograms to the square of its height in meters
Bolus retention	'bəʊləs rɪ'tenʃən	a rounded mass as a soft mass of chewed food
Bowel movement	'bəʊəl'muːvmənt	evacuation of feces from the

		gastrointestinal tract
Bundle	'bʌndl	a collection of fibers or strands, as of muscle fibers, or a fasciculus or band of nerve fibers
Chronic interstitial disease	'krɒnɪk ,ɪntə(:)'stɪʃəl dɪ'zi:z	a lung disease that affects the interstitium (the tissue and space around the air sacs of the lungs), persisting for a long time
Clostridium difficile toxin	'dɪfɪsɪl'tɒksɪn	a bacterium that can infect the bowel and cause diarrhoea
Closure	'kləʊʒə	the surgical closing of a wound by suture or staple
CMB colitis	kə'laitɪs	an inflammation of the colon, caused by a herpes-type virus
Colonoscopy		a medical procedure in which a special tube-shaped instrument is used to take pictures of the inside of someone's colon
Community-Acquired Pneumonia (CAP)	nju:'mæʊniə	pneumonia that a person acquires outside of a hospital or other health care institution and that arising in the general population
Consistent with	kən'sɪst(ə)nt wɪð	clinical decision making a phrase used by practitioners of the 'visual arts' of

		medicine, i.e. pathology and radiology, in which a diagnosis is based on a subjective interpretation of a particular pattern in a tissue, organ, or body region
Constipation	ˌkɒnstɪˈpeɪʃ(ə)n	is an acute or chronic condition in which bowel movements occur less often than usual or consist of hard, dry stools that are painful or difficult to pass
Crackle sound	ˈkrækl saʊnd	a series of short, sharp noises of air moving through the tracheobronchial tree, heard during auscultation of the chest
Cramping	ˈkræmpɪŋ	a sudden, involuntary, spasmodic muscular contracting that causes severe pain
Cutaneous sclerosis	kju(:)ˈteɪnjəs skliəˈrəʊsɪs	a multisystem autoimmune disease
Debilitated	dɪˈbɪlɪteɪtɪd	being in a severely weakened state
Degenerative joint disease	dɪˈdʒen(ə)rətɪv dʒɔɪnt dɪˈziːz	also known as osteoarthritis, this type of arthritis is caused by inflammation, breakdown and eventual loss of the cartilage of the joints
Dehydrogenase	diːˈhaɪdrədʒənz	an enzyme that helps conversing lactale

		into puruvate and back
Descending colon	dɪ'sendɪŋ'kɔvlən	the segment of the colon that extends from the end of the transverse colon at the splenic flexure on the left side of the abdomen down to the beginning of the sigmoid colon in the pelvis
Detectable	dɪ'tektəbl	noticeable; discoverable
Dimension	d(a)ɪ'menʃ(ə)n	a measurement of the size of something in a particular direction, such as the length, width, height or smth. else
Drug abuse	drʌg ə'bjʊ:s	use of a drug, whether over the counter or prescription, for purposes other than those prescribed on the product label, often for recreational reasons
Dyslipidemia		a disorder of lipoprotein metabolism, including lipoprotein overproduction or deficiency
Dysmotility		a condition in which muscles of the digestive system become impaired and changes in the speed, strength or coordination in the digestive organs occurs
Dysplasia	dɪs'pleɪzɪə	abnormal development or growth of tissues, organs, or cells
Dyspnea	dɪsp'niə	difficult or labored breathing; shortness

		of breath
Emaciated	ɪ'meɪʃɪeɪtɪd	abnormally thin
Endoscopy	'endɒskɒpi:	examination of the inside of the body by using a lighted, flexible instrument called an endoscope
Enema	'eni:mə	the injection of liquid into the rectum and colon by way of the anus
Enhanced	ɪn'hɑ:nst	raised to a higher degree
Esophageal peristalsis	ɪ,sɒfə'dʒɪəl ,pɛrɪ'stælsɪs	waves of involuntary contraction passing along the walls of the esophagus
Exacerbation	ɛks,æsə(:)'beɪʃən	increasing severity of a disease or any of its symptoms
Excretory duct	ɪk'skri:t(ə)rɪdʌkt	a duct through which the secretion is conveyed from a gland
Flare	fleə	a significant worsening of a disease or its symptoms
Follow up	'fɒləʊʌp	to monitor a patient's condition after a period of active treatment
Gambee's method	'meθəd	a good and safe operative technique for cervical esophagogastronomy
Hair follicle	heə'fɒlɪk(ə)l	a sac from which a hair grows and into

		which the sebaceous (oil) glands open
Hematochezia		bright red blood in the stool, usually from the lower gastrointestinal tract - the colon or rectum - or from hemorrhoids
Hydrocele	'haɪdrəʊsi:l	an accumulation of serous fluid in a sacculated cavity (as the scrotum)
Hyperlipidemia		elevated concentrations of any or all of the lipids in the blood
Ileostomy		an artificial opening created in the ileum and brought to the surface of the abdomen for the purpose of evacuating feces
Immunohistochemical		denoting the application of antigen--antibody interactions to histochemical techniques, as in the use of immunofluorescence
Incision	ɪn'sɪʒ(ə)n	a cut made into the body during surgery
Infiltration	ɪnfil'treɪʃ(ə)n	the pathological accumulation in tissue or cells of substances not normal to them or in amounts in excess of the normal

Interlacing	,ɪntə'leɪsɪŋ	linked or locked closely together as by dovetailing
Intermittent abdominal pain	,ɪntə'mɪt(ə)nt æb'dɒmɪn(ə)l peɪn	an unpleasant feeling occurring as a result of injury or disease, localized in abdomen alternately ceasing and beginning again
Intermittent course	,ɪntə'mɪt(ə)ntkɔ:s	the series of events in a disease incident in a patient
Kocher's maneuver		a surgical maneuver to expose structures in the retroperitoneum behind the duodenum and pancreas; for example to control hemorrhage from the inferior vena cava or aorta, or to facilitate removal of a pancreatic tumour. It is named for the Nobel prize-winning surgeon Dr. Emil Theodor Kocher
Lamina propria	'læmɪnə	a thin vascular layer of connective tissue underlying the epithelium of a mucous membrane
Laparotomy (Celiotomy)	,læpə'rɒtəmi	a surgical procedure involving a large incision through the abdominal wall to gain access into the abdominal cavity

Leukocytosis		an increased number of white blood cells
Lisch nodules	'nɒdju:lz	a pigmented hamartomatous nodular aggregate of dendritic melanocytes affecting the iris, named after Austrian ophthalmologist Karl Lisch (1907–1999), who first recognized them in 1937
Lumen	'lu:mən	the cavity of a tubular organ
Malignancy	mə'liɡnənsɪ	the tendency of a medical condition to become progressively worse
Malignancy	mə'liɡnənsɪ	a tumor that is cancerous and growing
Margin	'mɑ:dʒɪn	the outside limit or edge of a bodily part or a wound
Melena	mɪ'li:nə	abnormal black tarry stool that has a distinctive odor and contains digested blood
Mesalamine		an active metabolite of sulfasalazine, used in prophylaxis and treatment of inflammatory bowel disease
Mucosal disease	dɪ'zi:z	a usually fatal form of bovine viral

		diarrhea marked especially by high fever, diarrhea, and ulcers of the digestive tract
Nausea	'nɔ:zɪə	an unpleasant sensation vaguely referred to the epigastrium and abdomen, with a tendency to vomit
Nifedipine		a calcium channel blocker $C_{17}H_{18}N_2O_6$ that is a coronary vasodilator used especially in the treatment of angina pectoris
Obvious	'ɒbvɪəs	easily seen, recognized, or understood
Opacity	əʊ'pæsɪti	the condition of a tissue or structure, that makes it impervious to the rays of light
Palmar Telangiectasias	'pælmə	an abnormal dilation of red, blue, or purple superficial capillaries, arterioles, or venules typically located just below the skin's surface relating to the palm (the grasping side) of the hand
Pound	paʊnd	a unit of weight equal to 453.592 grams
Illicit drug	ɪ'ɪlɪt drʌg	a drug which is produced, trafficked and/or consumed without

		approving by law
Prior to		existing or happening before something else, or before a particular time
Proctocolectomy		surgical removal of the rectum and all or part of the colon
Proton Pump Inhibitors (PPIs)	'prəʊtɒn pʌmp ɪn'hɪbɪtəz	a group of drugs, that reduce the acid production in the stomach
Pseudopolyp		a projecting mass of granulation tissue, such as the masses that may develop in ulcerative colitis
Pulmonary embolus	'pʌlmən(ə)rɪ'embələs	blood clot that has been carried through the blood into the pulmonary artery or one of its branches, plugging that vessel
Raynaud syndrome	'sɪndrəʊm	excessively reduced blood flow in response to cold or emotional stress, causing discoloration of the fingers, toes, and occasionally other areas
Remainder	rɪ'meɪndə	something that left over after other parts have been taken away
Resection	rɪ'sekʃ(ə)n	surgical removal of all or part of an organ, tissue, or structure

Resemble	rɪ'zemb(ə)l	to be like or similar to
Retrograde	'retrəgreɪd	returning to an earlier and usually worse state or condition
Retrosternal		situated or occurring behind the sternum
Reveal	rɪ'vi:l	to make (something secret or hidden) publicly or generally known
Scattered	'skætəd	separated and gone in different directions
Sebaceous glands	sɪ'beɪfəsɡlændz	microscopic exocrine glands in the skin that secrete an oily or waxy matter, called sebum, to lubricate and waterproof the skin and hair of mammals
Serum albumin	'sɪ(ə)rəm'ælbjʊmɪn	the main serum protein of the blood in humans and other vertebrates, produced in the liver and active in the maintenance of blood osmotic pressure, and in the transport of fatty acids, steroids, and other compounds, including many drugs
Sjögren's syndrome	'sɪndrəʊm	a chronic inflammatory autoimmune disease that affects as a rule older women, that is

		characterized by dryness of mucous membranes especially of the eyes and mouth and by infiltration of the affected tissues by lymphocytes, and that is often associated with rheumatoid arthritis
Specimen	'spesɪmən	a small individual part of body material obtained for testing
Spindle cell	'spɪndlsəl	any of various cells that are shaped like spindles, being more or less round in the middle with two ends that are pointed
Squamous epithelium	'skweɪməs, epɪ 'θi:lɪəm	consisting of one or more cell layers, the most superficial of which is composed of flat, scalelike or platelike cells
Stain	steɪn	to discolor, to dye
Staining	'steɪnɪŋ	artificial coloration of a substance to facilitate examination of tissues, microorganisms, or other cells under the microscope
Steroid	'sterɔɪd	one of a large group of chemical substances classified by a specific carbon structure

Taper off	'teɪpəʊf	to reduce (diminish) gradually of a therapeutic dose, required by a patient over a prolonged period of time, of a particular drug
target appearance	'tɑ:ɡɪt' ə'pɪ(ə)rəns	a red center, a surrounding area
The ampulla of Vater	æm'pʊlə	a small dilatation in the major duodenal papilla which corresponds to the joining of the common bile duct and major pancreatic duct. It is also known as the hepatopancreatic ampulla or the hepatopancreatic duct
Thrombocytosis		an abnormality increased number of platelets in the blood
Transverse colon	trænz'vɜ:s'kəʊlən	the part of the colon that lies across the upper part of the abdominal cavity
Tubular adenoma	'tju:bjʊlə,ædə'nəʊmə	dysplastic polyp of the colonic mucosa that is considered a potential precursor of adenocarcinoma

Ulcerative colitis	'ʌls(ə)rətɪv kə'laɪtɪs	a bowel disease that is characterized by inflammation with ulcer formation in the lining of colon (large intestine)
Vena cava filter	'vi:nəcava'fɪltə	a device inserted into a major vein to prevent a blood clot from entering the lungs
Venturi mask	mɑ:sk	a type of disposable face mask used to deliver a controlled oxygen concentration to a patient
Vomiting	'vɒmɪtɪŋ	an act or instance of disgorging the contents of the stomach through the mouth
Warfarin		an anticoagulant drug taken to prevent the blood from clotting and to treat blood clots and overly thick blood

APPENDIX III. ABBREVIATIONS

I+2 - mm or less (assessment for edema)
AIAT - alpha-1-antitrypsin
ABG - arterial blood gas
BMI - body mass index
BP - Blood pressure
bpm - beats per minute
CAP - community-acquired pneumonia
CCB - calcium channel blockers
CMV - cytomegalovirus
CRP – c-reactive protein
CT - computed tomography
g/dl - grams per deciliter
GERD - gastroesophageal reflux disease
H&E - hematoxylin-eosin
HP - Heart rate
IU/l - International Units per Liter
J-pouch - ileoanal anastomosis surgery
mg - milligram
mg/dl - milligrams per deciliter
ml/h - milliliter per hour
mm - millimeter(s)
Pa O₂ . arterial oxygen
PCO₂ . partial pressure of carbon dioxide
PLE - protein-losing enteropathy
RR - respiratory rate
Sat O₂ . oxygen saturation
UC - ulcerative colitis