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Learning medical English.

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RESUMEN

Se elaboró un compendio de inglés médico como apoyo al programa de estudio, con el objetivo de elevar la calidad del aprendizaje en los estudiantes de 4to año de la carrera de medicina, además de brindar material de consulta en formato físico y digital complementando la bibliografía de la asignatura. Para ello se examinó el material de estudio existente de acuerdo a los principales objetivos de la materia y se determinaron los principales temas a reforzar basados en la experiencia de cursos anteriores. Paulatinamente se fue introduciendo en el proceso de aprendizaje, obteniendo como resultado un ascenso en la calidad de las evaluaciones en comparación con promociones anteriores, en especial en las principales unidades incluidas en el trabajo. Por lo que este trabajo constituye un elemento relevante en el proceso docente educativo, fomentando la preparación de los futuros médicos en el idioma extranjero.
Palabras Clave: Compendio de inglés médico, Aprendizaje, Bibliografía.

ABSTRACT

A Medical English Compendium was made to support this program with the objective to improve the learning process quality in 4th year medicine students and also to bring reference attributive material in physical and digital, complementing the bibliography of the subject. For this, the material in existence was examined it and based on the experience of the previous years it was determined the mainly topics to reinforce. It was inserted in the learning process step by step

getting as result a rise in the quality of the evaluations compare with the previous years, especially in the included units. For that reason this work constitutes an outstanding element in the educative learning process, supporting the future doctors training in foreign language.

Key words: medical English Compendium, learning, Bibliography.

DESARROLLO

Synoptic skeleton for case reports presentations

A/An ___-year-old (woman/man/girl/boy) (A) + (B) + (C) + (D) + (E) + (F) + (G) + (H) + (I) + (J) + (K) + (L) + (M)

Main/ Chief complaint (A): presented to (his general practitioner/ family physician (doctor)/ the emergency room (ER)/ the casualty department (CD)/ the clinic/ the polyclinic/ the consultation office)

Was admitted to …

Was brought into …

Attended the …

Was sent/ referred to …

Came / went to …

Main (Chief) complaint (B)

With a (main/chief) complaint of …

Complaining of …

Because …

Because of (due to) …

After ___-ing__ …

With/ a history of / that /which began (started) ($^{1}/_{24,}$ $_{1}/_{7}$, $^{1}/_{12}$, $^{1}/_{52}$) / accompanied by / no history of …

History of present illness (C)

On this occasion/ on arrival/ at the time of admission/ on admission/ on direct questioning/ on closer questioning/ on further questioning:

He/she was …

He/she said (that) he/she had/ had had …

He/she admitted / stated …

He/she reported …

Immediate past medical history (D)

Over the previous / for the last (past) ($^{1}/_{24,}$ $^{1}/_{7}$, $^{1}/_{12}$, $^{1}/_{52}$) he/she …

The only (relevant /significant) past (medical) history/ point(s) of note was/ were…

Is notable for…

Family medical history (E)

His/her father/ mother/ grandfather/ grandmother/ sister/ brother was/is …suffer(s) from /died of … had had…

There was/ is no family history of …

Both his/ her parents/ children/siblings/aunt /uncle are /is/were /was …

Is/was irrelevant / unremarkable

Social history: toxic habits, on/off medications (F)

(Include here: job (in)stability (if pertinent), un(married) (if relevant), socioeconomic conditions (if significant), tobacco, alcohol, coffee, eating habits (diet?), drugs and/or medications, dietary and sleep patterns, allergies, exercises/ sedentary lifestyle.

Physical examination (g)

O/E (On examination): Signs and other findings on.

Observation: (… was/were seen/ observed/ he/she was found/ observed to be)

Auscultation: (…was /were heard)

Percussion: … was/were heard…indicated;

Examination: he/she looked/ appeared (to be)/ was/ was found to be…/ There was (no)/were (no)… Examination of the … revealed/showed…

Vital signs: BP was ___ / (over) __mm/Hg, RR was b(breaths) / (per) min, P (HR) was __ b (beats)/ (per) min (regular/irregular), T was __°C (degrees Celsius)

f) He/she was… (Well/ no) oriented to t., p., p.

Laboratory tests, diagnostic procedures and/or investigations (H)

X-ray/ CT scan/ MRI/ Endoscopy/ Laparoscopy/ Colonoscopy Ultrasound/ Throat culture/ Vaginal/nose swab showed/ revealed/ demonstrated/ confirmed/ suggested the presence of…

Differential diagnosis (I)

…were (all) ruled out.

Diagnosis (J)

All the features of the history and examination are consistent with /points to a diagnosis of …

The presumptive/ tentative/ firm/ likely diagnosis is…

A diagnosis of … was made.

He/she was diagnosed as having…

No diagnosis was made.

Management and treatment (K)

He/she was given/ started (commenced) on /prescribed/ treated with… (This should also include not only drug prescription but also prophylactic treatment and other preventive (preventative) measures, follow-up after discharge (release) from hospital, and also psychological problems and home and/or workplace conflicts solutions if any

Possible complications (L)

The PCs are (if any)…/ PCs include…

Prognosis (M) The prognosis is excellent/ good/ poor/ guarded/ doubtful/ uncertain (unsure)/ bad/ gloomy/ bleak.

Main communicative functions in the case presentation.

1. Expressing the patient's general characteristics.

My patient, who was aged 22...

This was a 22- year- old man/woman…

My patient was 22 years old...

My patient aged 22...

My patient was a 22- year-old male / female...

My patient was a man/woman of 22 years old…

My patient was a man/woman of 22 years of age...

I had a 22- year- old boy / girl...

(Who) was admitted to the hospital...

(Who) came into the hospital…

(Who) was hospitalized...

(Who) presented to the hospital with...

(Who) attended the hospital…

(Who) was sent to the hospital...

(Who) was referred to the hospital...

(Who) was transferred to the hospital...

2. Expressing the patient's chief complaint.

Complaining of.....

Suffering from.....

With a complaint of.....

With a history of.....

Because of.....

Because he / she complained of.....

Because he / she had.....

Because he / she suffered from.....

Because he / she complained that he / she had.....

3. Expressing the history of the present illness.

The chief complaint(s) or the presenting symptoms should be described in terms of location, (radiation of pain), mode of onset, duration, frequency, description, exacerbating factors, relieving factors, associated symptoms, etc.

e.g. pain location----------epigastrium

radiation----------to the right

mode of onset---------sudden

duration----------1 to 3 hours

frequency----------after every meal

description ----------burning pain

exacerbating factors -alcohol, coffee

relieving factors-------milk and food

4. Expressing the accompanying symptoms.

The patient also reported....

In addition, he /she claimed.....

Besides, he / she stated.....

He / she also said he / she had.....

Furthermore, he / she had suffered from.....

He / she reported no.....

He / she denied.....

He / she had no.....

There was no history of.....

5. Expressing the patient's personal history.

He / she was in good health up to about one week.

He / she was healthy prior to this admission.

He / she enjoyed a healthy life up to his moment.

He / she had a healthy life prior to this admission.

He / she had suffered from.....

He / she had been suffering from.....

He / she had been having.....

He / she had had.....

6. Expressing the patient's family history.

His / her mother / father died of.....

His / her brother / sister had been suffering from.....

His / her brother had had hypertension.

7. Expressing the patient's social history.

He / she was married/single/divorced. He / she had children/he/she didn't have children.

He / she worked ...his financial situation was ..... He / she earned.....

He / she lived ...He usually_____. (Recreation)

His / her childhood was.....He was brought up. (Raised in...)

His / her family was noncontributory / unremarkable. /negative.

His / her personal history was contributory. /remarkable / positive

His / her social history was very strong.

His / her family history, social history and personal history were unremarkable.

8. Expressing the patient's toxic habits.

He / she smoked.....a day.

He / she was a heavy smoker.

He / she drank.....a day.

He / she was a heavy drinker.

He / she drank coffee.

He / she had no toxic habits.

He / she didn't drink / smoke.

9. Expressing the medications.

He / she was taking.....

He / she took.....

He / she had been taking....

He / she was on.....

10. Expressing the results of the physical examination.

On the physical.....

On physical examination.....

On examination.....

There was / were_____.

The patient had_____.

The principal findings / signs were_____.

_____and_____ were found // seen / observed / heard.

_____was found / seen / observe / heard.

The physical examination was unremarkable. / noncontributory / negative.

There were / was not significant finding(s)

The pertinent physical findings were related to the_____.

The rest of the physical examination was within normal limits.

The pertinent part of the physical examination was confined to the _____.

11. Expressing the presumptive diagnosis.

The presumptive diagnosis / diagnoses was / were.....

The most likely diagnosis / diagnoses was / were....

The diagnostic impression(s) was / were.....

12. Expressing the investigations.

In this case,__was indicated.

_____and____were ordered. / performed. /carried out. /undertaken

13. Expressing the results of the investigations.

The result was _____.

The results were as follows/the following:

Hgb was at 120g/l.

Hgb was elevated.

Hgb was elevated at 160 g/l.

Hgb and hematocrit were high.

It / They showed..... disclosed **/.** revealed./.demonstrated.

On urinalysis,

Stool test, There was / were_____.

WBC, _____was found.

Gastroscopy, _____and _____were found.

X-Ray, the patient had_____.

All of them were normal.

14. Expressing the differential diagnosis.

In the differential diagnosis, some diseases such as_____, _____and_____ were considered/ taken in to account / consideration / excluded / ruled out.

This disease could be mistaken for.....

This disease could mimic.....

This disease could resemble.....

This disease could be confused with.....

This disease could be distinguished from.....

This disease could be differentiated from.....

15. Expressing the definitive diagnosis.

_____was diagnosed.

The diagnosis of _____was made./reached./arrived at./confirmed /established.

16- Expressing the no pharmacologic treatment.

He / she was advised (not) to_____.

He / she was instructed (not) to _____.

He / she was recommended (not) to_____.

He / she was suggested that he/she should_____.

17- Expressing the pharmacologic treatment.

_____was indicated.

_____and_____ were prescribed. /ordered./ given

He / she was treated with_____.

18. Expressing the prognosis.

The prognosis was excellent. /outlook /good/ outcome /guarded /poor/ bad / fatal/ favorable/unfavorable

19- Expressing the complications.

There was no complication.

There were no complications.

He / she had no complications.

He / she did not have any complications.

There was / were complication(s). He / she had_____.

He / she had some complications such as_____.

He / she had_____

HYPERTENSION

- Definition

Hypertension (HTN or HT), also known as high blood pressure (HBP), is a long term medical condition in which the blood pressure in the arteries is persistently elevated at or above 140/90 mmHg for most adults.

- Risk factors

Age, race, sex, smoking, alcohol intake, serum cholesterol, glucose intolerance and weight.

- Signs and symptoms

Hypertension is rarely accompanied by symptoms, and its identification is usually through screening, or when seeking healthcare for an unrelated problem. Some with high blood pressure report headaches particularly at the back of the head and in the morning, as well as lightheadedness, vertigo, tinnitus, altered vision or fainting episodes. These symptoms, however, might be related to associated anxiety rather than the high blood pressure itself.

On physical examination, hypertension may be associated with the presence of changes in the optic fundus seen by ophthalmoscopy. The severity of the changes typical of hypertensive retinopathy is graded from I–IV; grades I and II may be difficult to differentiate. The severity of the retinopathy correlates roughly with the duration and/or the severity of the hypertension.

- Staging

Classification of blood pressure for adults (JNC7)

Category	**systolic, mm Hg**	**diastolic, mm Hg**
Normal	90–119	60–79
High normal (Prehypertension)	120–139	80–89
Stage 1 hypertension	140–159	90–99
Stage 2 hypertension	160–179	100–109
Stage 3 hypertension	≥180	≥110

(Hypertensive emergency)

Isolated systolic hypertension ≥140 <90

- Types

There are an essential or primary hypertension and a secondary hypertension. The main diffirence between them is due to causes.

- Diagnosis

Traditionally, the National Institute of Clinical Excellence recommends three separate resting sphygmomanometer measurements at monthly intervals. The American Heart Association recommends at least three resting measurements on at least two separate health care visits. Ambulatory blood pressure monitoring over 12 to 24 hours is the most accurate method to confirm the diagnosis.

An exception to this is those with very high blood pressure readings especially when there is poor organ function. Initial assessment of the hypertensive people should include a complete history and physical examination.

- Treatment

The first line of treatment for hypertension is lifestyle changes, including dietary changes, physical exercise, and weight loss. Dietary changes shown to reduce blood pressure include diets with low sodium, the DASH diet, and vegetarian diets. While potassium supplementation is useful it is unclear if a high dietary potassium intake is beneficial. Physical exercise regimens which are shown to reduce blood pressure include isometric resistance exercise, aerobic exercise, resistance exercise, and device-guided breathing. Stress reduction techniques such as biofeedback or transcendental meditation may be considered as an add-on to other treatments to reduce hypertension, but do not have evidence for preventing cardiovascular disease on their own.

Several classes of medications, collectively referred to as antihypertensive medications, are available for treating hypertension. First line medications for hypertension include thiazide-diuretics, calcium channel blockers, angiotensin converting enzyme inhibitors and angiotensin receptor blockers. These medications may be used alone or in combination; the latter option may serve to minimize counter-regulatory mechanisms that act to revert blood pressure values to pre-treatment levels. The majority of people require more than one medication to control their hypertension.

PNEUMONIA

- Definition

Pneumonia is a disease of the respiratory system consisting of inflammation of the alveolar spaces of the lungs. Most of the time pneumonia is infectious, but it is not always so. Pneumonia can affect a complete lung lobe (lobular pneumonia), a lobe segment and alveoli close to the bronchi (bronchopneumonia) or interstitial tissue (interstitial pneumonia).

- Classification

Pneumonias can be classified into:

Depending on the causal agent: pneumococcal, staphylococcal pneumonia, pneumonia by Klebsiella, pneumonia by Legionella, among others.

Depending on the scope of acquisition: acquired in the community, hospital or nosocomial pneumonia.

- Signs and symptoms

It is usually preceded by a disease such as the flu or the common cold. Increased respiratory rate. There is a sinking or retraction of the ribs with breathing, which can be easily observed with the bare chest. The nostrils open and close like a quick flutter with breathing. People with pneumonia often have a cough that can produce mucopurulent sputum, a high fever that may be accompanied by chills. Respiratory limitation is also common as well as thoracic pain of pleuritic features. They may also have hemoptysis and dyspnea. It is usually accompanied by general state compromise (anorexia, asthenia, and adynamia).

General physical examination is likely to find tachycardia, tachypnea, and low blood pressure, either systolic or diastolic. At segmental physical examination, pulmonary condensation syndrome is often unclear; to palpation: decreased expansion and thoracic elasticity and increased vocal vibrations; percussion: dullness; auscultation: decreased vesicular murmur. There may be a picture composed of tubal murmur surrounded by a crown of crackling rales.

In adults over 65 years old, a symptomatic manifestation is likely to be much more subtle than that found in young people.

- Diagnosis

The diagnosis of pneumonia is based both on the patient's clinic and as a result of Rx. Generally, chest XRs (posteroanterior and lateral), blood analytical and microbiological cultures of sputum and blood are used. Chest radiography is the standard diagnosis in hospitals and clinics with access to x-rays.

- Treatment

Most cases of pneumonia can be treated without hospitalization. Usually, oral antibiotics, rest, fluids, and home care are sufficient to complete the resolution. However, people with pneumonia who are having difficulty breathing, people with other medical problems, and the elderly may need more advanced treatment. If symptoms worsen, pneumonia does not improve with home treatment, or complications occur, the person often has to be hospitalized. Antibiotics are used to treat bacterial pneumonia. In contrast, antibiotics are not useful for viral pneumonia, although they are sometimes used to treat or prevent bacterial infections that can occur in the lungs damaged by viral pneumonia. The choice of antibiotic treatment depends on the nature of pneumonia, the most common microorganisms that cause pneumonia in the local geographic area, and the underlying immune status and health of the individual. Treatment of pneumonia

should be based on the knowledge of the causative organism and its sensitivity to known antibiotics.

- Complications

People who have trouble breathing due to pneumonia may require extra oxygen. Extremely ill individuals may require intensive treatment care, often including intubation and artificial ventilation.

CATARACTS

- Definition

A cataract is a clouding of the normally clean lens of the eye. Cataracts commonly affect distant vision and problems with glare. It can develop in one or both eyes

- Signs and symptoms

Clouded, blurred or dim vision. Increasing difficulty with vision at night**.** Sensitivity to light and glare**.** Halos around lights**.** Necessity of brighter light for reading**.** Frequent changes in eyeglass or contact lenses prescription**.** Fading or yellowing of colors**.** Double vision in a single eye.

Note: pain, redness, itching, irritation, and discharge from the eye are not signs or symptoms of cataracts.

- Types of cataracts.

Nuclear

Cortical

Subcapsular

Congenital

- Risk factors

Age (over 65 years old)

Diabetes

Family history of cataracts.

Previous eye injury or inflammation

Previous eye surgery

Prolonged use of corticosteroids

- Investigations

Visual acuity test (how clear a person sees an object).

Slit-lamp examination (to see the front of the eye under magnification).

Retinal examination (the doctor puts dilating drops in the eyes to open the pupils wide and provide a bigger window to the back of the eyes).

- Treatment

The only effective treatment for cataracts is surgery (to remove the clouded lens and to replace it with a clear lens implant). Cataracts cannot be cured with medication, dietary supplements or any other treatment.

- Surgery

Surgical methods used to remove cataracts:

Phacoemulsification

Extracapsular cataract extraction

Note: If cataracts are in both eyes the doctor generally removes one first and then the other to let the first eye to recover before the second surgery.

- Complications

They are very rare and most can be treated. They include:

Inflammation

Infection

Bleeding

Swelling

Retinal detachment

Glaucoma

GLAUCOMA

- Definition

Glaucoma is a group of eye diseases that gradually reduce sight without warning.

Vision loss is caused by damage in the optic nerve. It was once believed that high pressure within the eye, also known as intraocular pressure (IOP), is the main cause of optic nerve damage. Although IOP is clearly a risk factor, now it´s known that other factors must also be involved, because even people with ¨normal¨ levels of pressure can experience vision loss from Glaucoma.

Adult glaucoma falls into two categories

Open-angle glaucoma

Closed-angle glaucoma

Types of glaucoma

Primary Open Angle Glaucoma

Angle Closure Glaucoma

Normal tension Glaucoma

Secondary Glaucoma

Pseudoexfoliative Glaucoma

Pigmentary Glaucoma

Pediatric Glaucoma

- Risk factors

African-Americans

People over 60

Family members with Glaucoma

Hispanics in older age groups.

Asians

Steroid users

Eye injury

High myopia (nearsightedness)

Diabetes

Hypertension

Certral corneal thickness less than 5 mm.

- Signs and symptoms

In the early stages of the disease there may be no symptoms. Half the people affected with glaucoma do not know they have it.

Symptoms of chronic glaucoma (including open-angle glaucoma)

Gradual vision deterioration, peripheral vision deterioration,dim peripheral vision, degraded side vision, tunnel vision, blurred vision, foggy vision , sensitivity to light, difficulty adjusting to brightness, halos around bright lights, mild eye pain, mild one-sided eye pain, nausea, headaches.

Symptoms of acute glaucoma (including closed-angle glaucoma)

Halos around objects, blurred vision, severe eye pain, severe headache, tender eyeball, hard eyeball, vision deterioration, red eye, swollen eye.

- Diagnostic tests

Early detection, through regular and complete eye exams, is the key to protecting the vision from damage caused by Glaucoma. The eyes should be tested:

Ages 34 and 40

Age 40 to age 60 -every two to four years-

After age 60 – every one to two years

Tonometry: To messure the inner pressure of the eye.

Ophthalmoscopy: to examine the inside of the eye especially the optic nerve If the pressure in the eye is not normal, or if the optic nerve looks unusual, then two special tests are done:

Perimetry: A visual field test. It helps to draw a map of your vision.

Gonioscopy: A painless eye test that checks if either open angle or closed angle glaucoma is present.

Optic Nerve Computer Imaging (ONCI)

Pachymetry: A simple test to determine Cornel Thickness.

- Treatment

Dependeing upon the type of glaucoma.

Glaucoma medications: Adrenergic, alpha agonist, beta blockers, carbonic anhydrase inhibitors (CAI), cholinesterase Inhibitor (CI), prostaglandin analogs (PA).

Surgery: Laser surgery, Filtering microsurgery, Selective laser trabeculoplasty (SLT).

- Staging

0----- normal

1----- early

2----- moderate

3----- advanced

4----- severe

5----- end stage

- Complications

Intraoperative and postoperative suprachoroidal hemorrhage

Hypema, hypotony, visual loss, vitreous loss, cataract formation.

OTITIS MEDIA

- Definition

It is an inflammation of the middle ear and is the most frequent infectious disease in children.

- Risk factors

First episode < than 18 months of age

Males

Previous episodes of otitis media

Exposure to second-hand smoke

Sibling history of recurrent otitis media

Bottle feeding

Attendance at large day-care centers

- Symptoms and signs

Acute onset of unilateral otalgia, nausea and vomiting, fever, diarrhea, nasal discharge, sense of fullness or pressure in the ear, irritability, hearing loss.

- Types

Otitis media.

Acute suppurative otitis media.

Chronic otitis media.

Nonsuppurative otitis media.

- Investigations

Otoscopy

Tympanometry

- Treatment

Antibiotic therapy

Analgesics

Antibiotics

Descongestants

Antihistamines

Topic corticosteroids

- Complications

Ear polips, cholesteatomas, meningitis, chronic hearing loss, mastoiditis.

- Prognosis

Otitis media is a self-limiting condition that does not recur once the adolescence is reached. In a small number of patients it becomes chronic.

SINUSITIS

- Definition

It is an inflammation of the mucosal lining of one or more of the paranasal sinuses including the ethmoid, maxillary sphenoid, and frontal sinuses.

- Risk factors

Very young and very old people
Women appear to be more at risk than men
People in higher income and educational groups.
Caucasians and African Americans are at more risk than Hispanic Americans.

- Signs and symptoms

They are in many ways similar to those noted for other upper respiratory infections.
Rinorrhea (often purulent), midfacial or periorbital pain, congestion, fever, cheek swelling, conjunctival swelling, headache, maxillary toothache, altered sense of smell and taste and nasal voice.
The presence of maxillary toothache, purulent secretion in the nasal meatus, and history of colored nasal discharge may be an indicator of sinusitis.

Types	Investigations
Acute	Throat culture
Subacute	X-rays
Recurrent	CT scan
Chronic	Endoscopy

- Treatment

For sinusitis caused by virus infection no antibiotic treatment is needed.
Pain and fever medications, decongestants.
Acute sinus infection from bacteria is usually treated with antibiotic therapy
(Amoxicillin).
In the penicillin allergic patient:
Cefaclor (first choice treatment)
Clarithromicin.
Azithromicin.
Endoscopy sinus surgery (ESS)
Computer- assisted sinus surgery

CONCLUSIONES

La confección de bibliografía actualizada y su puesta en práctica en la asignatura de Inglés en la carrera de Medicina, especialmente en el 4to año, trae aparejado un aumento significativo de la calidad del proceso de aprendizaje, reflejado cualitativa y cuantitativamente a través de las evaluaciones periódicas así como la práctica diaria durante el proceso docente. Con la revisión de temas, vinculados a la formación como galenos y en idioma extranjero, se fomenta su preparación en ambas aristas por lo que constituye un eje integral e importante en el nuevo profesional que se forma. Además respalda la bibliografía existente a la vez que actualiza la información y las vías de recibirlas.

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