

Unit 1

Cardiovascular System

Cardiovascular System

Chapter I

- 1- History
- 2- Chest pain
- 3- Associated factors
- 4- Relieving factors
- 5- Exacerbating factors

Ischaemic heart disease:

1. Risk factors
2. Dyspnoea
3. Ankle oedema
4. Palpitations

Heart failure

1. Peripheral vascular symptoms
2. Thromboembolic disease
3. Common cardiac conditions

Cardiac Patient: Dialogue



Chapter -I-

Cardiovascular System

1. History
2. Chest pain
3. Associated factors
4. Relieving factors
5. Exacerbating factors

History: The history in cardiovascular assessments is crucial for identifying the underlying causes of symptoms. A thorough patient history helps healthcare providers distinguish between different types of cardiovascular issues, such as angina, heart failure, or myocardial infarction. Detailed questions regarding symptoms, risk factors, and family history guide the diagnostic process.

Chest Pain: Chest pain is a primary symptom associated with various cardiovascular conditions, such as angina pectoris or heart attacks. The nature, duration, and intensity of chest pain provide important clues about the type and severity of the cardiovascular problem. Chest pain can range from sharp and localized to a dull, pressure-like sensation.

Associated Factors: Associated factors include other symptoms or conditions that may occur alongside chest pain. These could include shortness of breath, dizziness, nausea, sweating, or palpitations, which help clinicians, assess the severity of the situation. It's also important to consider underlying risk factors such as hypertension, diabetes, or family history of heart disease.

Relieving Factors: Relieving factors refer to actions or treatments that alleviate chest pain or other symptoms. For instance, patients may experience relief with rest, nitroglycerin, or oxygen in cases of angina. Identifying relieving factors helps determine the nature of the cardiovascular issue, whether it's stable angina or something more urgent like a myocardial infarction.

Exacerbating Factors: Exacerbating factors refer to conditions or activities that worsen chest pain or other cardiovascular symptoms. These can include physical exertion, emotional stress, cold temperatures, or large meals. Recognizing these factors is important for evaluating the potential triggers and managing the risk of more severe cardiac events.



Cardiovascular System

Ischaemic heart disease:

1. Risk factors
2. Dyspnoea
3. Ankle oedema
4. Palpitations

1. Risk factors

Patient history	Interrogatoire du malade
Do you smoke?	Fumez-vous ?
Do you have any of the following :	Avez-vous ?
<ul style="list-style-type: none"> • High cholesterol? • Diabetes? • Hypertension (Blood pressure)? • A family history of heart problems (parents siblings)? • A personal history of heart problems? • Angina? 	<ul style="list-style-type: none"> • Du cholestérol ? • Diabète ? • De l'hypertension artérielle ? • Un antécédent familial de problèmes cardiaques (parents, frères et sœurs) ? • Un antécédent personnel de problème cardiaque ? • Angine de poitrine (angor)?
Have you ever had a heart attack?	Avez-vous déjà eu une crise cardiaque ?
<ul style="list-style-type: none"> • Myocardial infraction(MI) • Acute coronary syndrome(ACS) 	<ul style="list-style-type: none"> • Infarctus de myocarde (IDM) • Syndrome coronarien aigu (SCA)
How did you present?	Quel a été votre mode de présentation ?
<ul style="list-style-type: none"> • Collapse/faint • Chest pain 	<ul style="list-style-type: none"> • Perte de connaissance/ malaise • Douleur dans la poitrine
Is this pain similar to what you feel then?	Cette douleur est-elle similaire à celle que vous avez ressentie à ce moment-là ?
How was it treated?	Quel a été votre traitement ?
<ul style="list-style-type: none"> • Tablets • Thrombolysis • Angiogram : - Do you have any stent ? - How many? • Drug eluting stent(DES) • Coronary artery bypass grafts(CABG “by pass”) 	<ul style="list-style-type: none"> • Comprimés • Thrombolyse • Angiographie - Est-ce que vous avez des stents ? - Combien ?
	Stent actif (libérant un médicament)
	Pontage aortocoronarien (PAC)

2. Dyspnoea / Dyspnée

<p>Do you get short of breath (SOB): After exertion? Short breath on exertion(SOBOE)</p> <ul style="list-style-type: none"> • Walking? <p>How far can you walk on a level surface without getting short of breath? (In meters).</p> <ul style="list-style-type: none"> • Climbing stairs? <p>How many stairs can climb without getting breathless?</p> <p>Do you feel short of breath at rest?</p> <p>Is it present when are:</p> <ul style="list-style-type: none"> • Sitting? Lying down flat? <p>Can you sleep flat?</p> <p>How many pillows do you need to avoid getting short breath?</p> <p>Do you wake up at night gasping for breath (with choking sensation)?</p> <p>Paroxysmal nocturnal dyspnoea(PND),</p> <p>Have you ever been told that you have a murmur?</p>	<p>Devenez-vous essoufflé : Après un effort Essoufflement a l'effort, en marchant Quelle distance pouvez-vous marcher avant d'être essoufflé ? En montant des escaliers ? Combien de marches pouvez-vous monter avant d'être essoufflé? Etes-vous essoufflé au repos ? Etes-vous essoufflé lorsque vous êtes :</p> <ul style="list-style-type: none"> • Assis ? couché ? <p>Pouvez-vous dormir à plat ? Combien d'oreillers vous-faut-il pour ne pas être essoufflé ? Vous réveillez-vous la nuit avec une sensation d'étouffement ? Dyspnée paroxystique nocturne (DPN) Vous-a-t-on déjà dit que vous aviez un souffle cardiaque ?</p>
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3. Ankle oedema/ Œdème des chevilles

<p>Do your ankles swell? (one /both) When (evening, morning, all the time) Does the swelling decrease (if you lie down? If you have your legs up? Never? How far up does the swelling go? (calves, thighs, genitalia, sacrum)</p>	<p>Avez-vous des chevilles enflées ? (les deux, une) Quand ?(le soir, le matin, tout le temps) Est-ce que les œdèmes diminuent (si vous vous allongez ?, si vous surélevez vos jambes ? jamais. Jusqu'ou monte l'œdème ? (mollets, cuisses, organes génitaux, sacrum)</p>
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4. Palpitations

<p>Do you ever get palpitations? Do you feel your heart beat fast and strong? Does your heart give an occasional thump now and then?</p> <p><u>Mode of onset</u> Is the onset of palpitations (sudden? Gradual?</p> <p><u>Associated factors</u> What brings on the palpitations usually? (Emotions, exercise, an excess amount of Caffeine, smoking, alcohol)</p> <p><u>Duration</u> How long have you been complaining of palpitations? How long does the attack of palpitations last? How often do you get them? Did you ever feel your own pulse during an attack? Did it feel (regular, irregular) Was it around :(100-130 per minute? 150? 180?</p>	<p>Avez-vous des palpitations ? Sentez-vous que votre Cœur bat vite et fort ? De temps en temps, ressentez-vous un choc violent dans la poitrine ? <u>Mode de début</u> Ces palpitations débutent-elles : (brutalement? Progressivement ?</p> <p><u>Facteurs associés</u> Qu'est- ce qui les déclenche habituellement ? (des émotions, un effort, un abus de caféine de tabac d'alcool)</p> <p><u>Durée</u> Depuis combien de temps vous plaignez-vous de palpitations ? Combien de temps ces épisodes de palpitations durent-ils ? A quelle fréquence surviennent-ils ? Avez-vous déjà pris votre pouls lors d'un de ces épisodes ? Semblait-il (régulier, irrégulier) Etait-il autour de :100- 130 par minute ? 150-180 ? Incomptable ?</p>
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Impossible to count?

The end of the palpitations

Is the end of the attack: (suddenly, gradually)

Treatment

Have you been to the hospital with palpitations?

Were they successfully stopped?

What did they do?

- Manoeuvre?
- A medication through the vein?
- An electric shock?

A drug-eluting stent is a peripheral or coronary stent placed into narrowed, diseased peripheral or coronary arteries that slowly release a drug to block cell proliferation. This prevents fibrosis that, together with clots, could otherwise block the stented artery, a process called restenosis

Mode de terminaison

L'épisode se termine-t-il :(brusquement, progressivement)

Traitement

Vous-êtes-vous déjà présenté à l'hôpital à cause de ses palpitations ?

A-t-on réussi à les arrêter ?

Qu'on-il-fait ?

- Des manœuvres
- Un médicament intraveineux ?
- Un choc électrique

Un stent à élution de médicament est un stent périphérique ou coronaire placé dans des artères périphériques ou coronaires rétrécies et malades qui libèrent lentement un médicament pour bloquer la prolifération cellulaire.



Cardiovascular System

III. Heart failure

1. Peripheral vascular symptoms
2. Thromboembolic disease
3. Common cardiac conditions

Les critères d'insuffisance cardiaque selon NYHA (New York Heart Association).

Laquelle de ces descriptions correspond le mieux à votre état ?

Which of the following best describes your complaint?

- 1- Pas de symptômes, pas de limitations dans les activités habituelles.
No symptoms, no limitations in ordinary activities.
- 2- Léger essoufflement/angor pendant des activités habituelles à cause des symptômes, à l'aise seulement au repos.
Mild shortness of breath/angina during ordinary activities.
- 3- Limitations marquée pendant des activités habituelles à cause des symptômes, à l'aide seulement au repos.
Marked limitations ordinary activities due symptoms, only comfortable at rest.
- 4- Symptômes au repos (alidité)
Symptoms at rest (bed bound)
- 5- Insuffisance cardiaque congestive(ICC)
Congestive cardiac failure (CCF)
- 6- Lipothymie syncope (Perte de connaissance).
Syncope (get a fainting sensation)
 1. **Peripheral vascular symptoms : (signes fonctionnels vasculaires)**
 - Claudication intermittente (le siège exacte de la douleur)
Pieds-mollets- cuisse- fesse
Intermittent claudication (site of the pain)
Foot-calf-thigh-buttock
 - Est-ce que la douleur commence après avoir marché une certaine distance ?
Does the pain start after walking certain distance?
Quelle est la distance qui déclenche la douleur ? (mètres)
How far can you walk before the pain begins? (Meters)
Au bout de combien de temps la douleur disparaît-elle ? (seconde, minute, heure)
How long does the pain take to wear off? (Second -minute- hour).
Pouvez-vous ensuite marcher à nouveau la même distance ?
Can you then walk the same distance again?
Avez-vous déjà eu un traumatisme à cette jambe ?
Did you injure this leg in the past?
Avez-vous remarqué qu'une petite égratignure prend longtemps à cicatriser ?
Have you noticed that a simple scratch on your leg takes a long time to heal?
 - Douleurs de décubitus (pain at rest)
Quelles positions calment la douleur ? Jambes pendante- la marche.

What positions relieves the pain? Legs hanging down, walking.

- Température et couleur des pieds
- **Temperature and colour of feet. Do your feet get? (Vos pieds sont-ils?)**

Cold (always , only at rest, when walking)	Froids (en permanence, au repos seulement, à la marche)
A change in their colour (pallor, blueness, redness)	D'une couleur différente (pâleur, violacée, rougeur)
Paraesthesia: Do you get tingling (pins and needles) In feet? In fingers?	Paresthésie des extrémités : avez-vous des picotements (des fourmis) dans les pieds ?doits ?

2. Thromboembolic disease/ Maladie thrombo-embolique

Deep venous thrombosis (DVT)/ thrombose veineuse profonde (TVP)

Is your calf (red, hot, tender, and swollen?)/ Votre mollet est-il? (Rouge, chaud, tendu enflé ?).

Risk factors for Venothrombo - embolism (VTE):

- Have you recently had (an injury? surgery? Had a period of immobility? Avez-vous récemment eu (un traumatisme ? eu une opération ? eu une période d'immobilisation ?
- Have you suffered from: clot in your leg? Cancer? Avez-vous déjà eu ? Phlébite ? Un Cancer ?
- Are there any clotting disorders in your family? Y a-t-il des personnes dans votre famille souffrant de troubles de la coagulation ?

3. Common cardiac conditions/ Pathologies cardiaques fréquentes

Ischemic heart disease (IHD)	Maladie cardiaque ischémique
Mitral regurgitation	Insuffisance mitrale
Mitral stenosis	Rétrécissement mitral
Aortic regurgitation	Insuffisance aortique
Aortic stenosis	Rétrécissement aortique
Patent foramen ovale (PFO)	Foramen ovale perméable (FOP)
Patent ductus arteriosus	Persistance du canal artériel
Atrial septal defect (ASD)	Communication interauriculaire (CIA)
Ventricular septal defect (VSD)	Communication interventriculaire (CIV)
Tetralogy of Fallot	Tétralogie de Fallot
Coarctation of the aorta	Coarctation de l'aorte
Pericarditis	Péricardite
Rheumatic fever	Rhumatisme articulaire aigu
Infective endocarditis (IE)	Endocardite infectieuse (EI)
Myocarditis	Myocardite
Dilated cardiomyopathy	Cardiomyopathie dilatée
Hypertrophic cardiomyopathy (HCM)	Cardiomyopathie hypertrophique
Sick sinus syndrome	Maladie de l'oreillette



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Chapter -I-

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Cardiovascular System

- Cardiac Patient -

- Cardiovascular disease (CVD) is the leading cause of death in industrialised countries.
- The first questions will be about any **chest pain**.

Chest Pain: A Medical Consultation"

D: Good morning, Kate. Come in and have a seat.

P: Thank you, Doctor Pearson.

D: What can I do for you today, Kate?

P: Last night, in bed, I had a terrible pain in my chest. I thought I was going to die!

D: Can you show me where your pain was?

P: Here, on my left side.

D: Can you describe the pain?

P: It was squeezing and crushing as if someone was lying on my chest!

D: And how long did it last?

P: At least 20 minutes!

D: I see. Did the pain go anywhere else?

P: No, not really but I also had some indigestion.

D: Did you have any nausea or vomiting?

P: Yes, I throw up a couple of times.

D: Were you short of breath?

P: Yes, I felt I could not breathe.

D: And did you feel dizzy?

P: Yes everything was turning around me.

D: Did you notice you were sweating?

P: Yes some cold sweats.

D: Any buzzing in your ears?

P: No.

D: Do you smoke, Kate?

P: I used to but I stopped a couple of years ago.

D: Do you exercise on a regular basis?

P: No, I don't do any sports. With my job as journalist I don't have the time to go to the gym.

D: What type of food do you eat?

P: You know, Doctor Person, I'm a vegan. I don't eat meat products.

D: Are you on the pill, Kate?

P: No, not at the moment.

D: Is this the first time you've had this type of pain?

P: Yes, Doctor.

D: Do you sometimes feel your heart skips a beat?

P: Yes, I do. It usually occurs when I'm hungry or stressed.

D: Is there any heart disease running in your family?

P: My grand-father on my dad's side died of heart attack when I was young.

D: How old was he when he died?

P: About 60 years old.

D: Are you stressed at the moment, Kate?

P: Yes. It's been really hard at work lately.

D: Right, Kate. I think, at this stage, I'm going to have to examine you. Could you hop on the table examining table and roll up your sleeve for me, please? I'm going to check your blood pressure... 110 over 80. Your pressure is normal.

I'm going to take your pulse...80 per minute. That's perfect.

I'm going to listen to your heart. Could you slip off your shirt for me, please? Good. It sounds normal...I cannot see anything wrong but just to be on the safe side, I'm going to run an ECG.

P: Is it painful?

D: No, it is a painless procedure. It measures the electrical impulse of your heart to see if there are any abnormalities. I'm going to place electrodes on your chest, your arms and your legs with wires attached to the ECG machine.

P: Ok, Doctor.

D/ Doctor

P/ Patient



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Chapter -I-

Cardiovascular System

Exercise 1

Complete the text using the following words, then translate each word to French.

1 **by-pass surgery**, 2 **risk factors**, 3 **treatment**, 4 **ischaemic**, 5 **exertion**, 6 **squeezing pain**, 7 **chest**, 8 **medication**, 9 **sweat**, 10 **nauseated**, 11 **medical ward**, 12 **myocardial**, 13 **Cardiac**, 14 **SOB**, 15 **oedema**, 16 **overweight**,

A patient is admitted to the..... care unit (CCU) with myocardial infraction.

Although (bien que) the patient is relatively young, he already has a long history of (CAD). He shows some andin the ankles. **Furthermore** (de plus) his cholesterol level is elevated and he is The patient is physically inactive, smokes heavily and eats irregularly.

Despite (en dépit de) and the use of sublingual nitro-glycerine, there has been no sign of improvement. Periods of, pain seems to have increased over the last few months, especially on

Returning from work yesterday, he felt ain his that was, **however** (cependant), not relieved by He broke out into a cold and felt

His test results show elevated serum levels **as well as** (aussi bien que) high levels of cholesterol, triglycerides and lipoproteins.

After further investigation, he was found to suffer from coronary blockage. He was transferred to the, and in the absence of complications **during** (pendant, durant) the period of recovery the patient will be considered for

Obviously (il est clair que, en évidence) the patient will need some re-education to help him reduce the (overweight, lack of exercise, hypertension and smoking).

Unless (à moins que) the patient reduces these factors significantly, he will remain a prime candidate for a majorinfraction.

Exercise 2

Here is the report of a general practitioner (GP) for a referent, a medical specialist. In English, ask at least **10 questions** to obtain information about the patient's identity and condition using the underlined information.

Clinical details	
	Date
	Urgent
Dear Dr Hennaoui	
I would be grateful if you could give me your opinion and advice with regard to Mr/Mrs/Miss: HENDERSON, John	
Although the patient, who is a <u>salesman</u> , is relatively young, <u>45 years old</u> , he had a <u>severe attack of central chest pain six month</u> ago which <u>lasted 10 minutes</u> and was, however, relieved by rest. This has <u>recurred several times after exertion</u> . His father <u>died aged 55 of a coronary thrombosis</u> . Physical examination was normal and, therefore, I refer him to you for further assessment in view of his age, occupation and <u>unhealthy lifestyle</u> .	
Diagnosis : angina pectoris	
Thank you for seeing him.	
Kind regards,	
Dr. P. M.LAHBIB	

Exercise3

What is the English for the following sentences?

- Le malade a ressenti des douleurs thoraciques en étai.
- Il s'est réveillé plusieurs fois pendant la nuit.
- Après les soins d'urgence, le patient a été transféré en service de cardiologie.
- Le résultat a montré un taux élevé de cholestérol.
- L'infirmière a pris sa tension artérielle
- La douleur a augmenté à l'effort.
- Aviez-vous déjà eu des pertes de connaissance ?
- J'ai une douleur très vive à la poitrine et au bras gauche.