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醫護英語

NURSING ENGLISH *for Pre-Professionals*



國內第一套數位醫護英語教材

- 專業護理人員深造或就業最佳利器
- 互動式影片實景教學，學習更加身歷其境
- 精選 16 大醫護英語重點科別，1 書抵 16 書
- 根據真實病例編寫專業護理實用對話，立即學以致用
- 發展觀光醫療必備用書
- 聽、說、讀、寫並重訓練，效果加倍

LiveABC
英語數位學習第一品牌

Lesson 2

Cardiovascular Unit

心血管科

Learning Goals:

- ◆ *Talking about Chest Tightness (胸悶)*
- ◆ *Assessing Cardiovascular Conditions*
- ◆ *Explaining Discharge Plans*

Scene I

Admission Interview
入院問診

Scene II

Hospitalization
住院治療

Scene III

Discharge Teaching
出院衛教

Case Information:

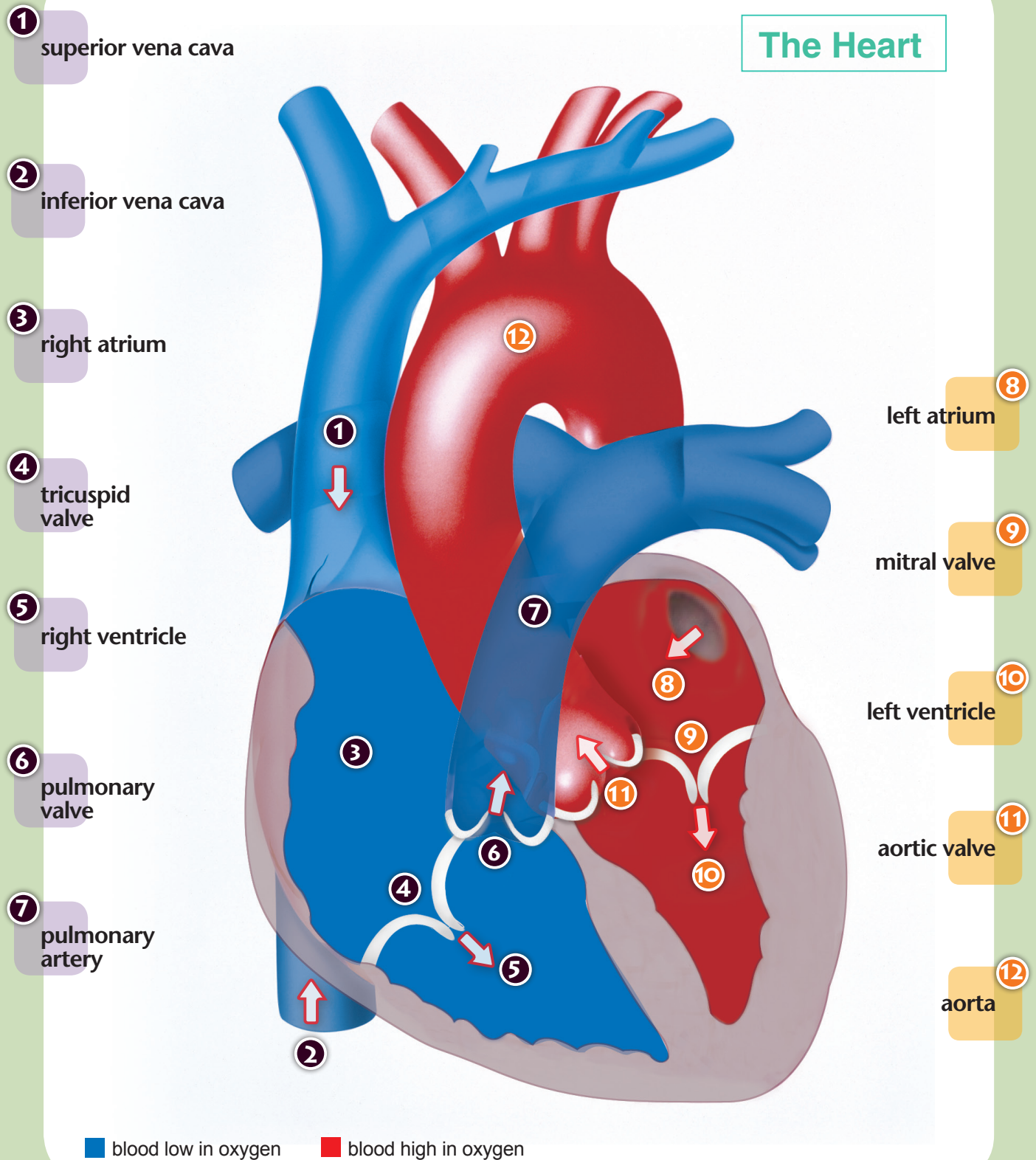
Severe Chest Pain 嚴重胸痛

[sə'veɪr] [tʃest] [pen]

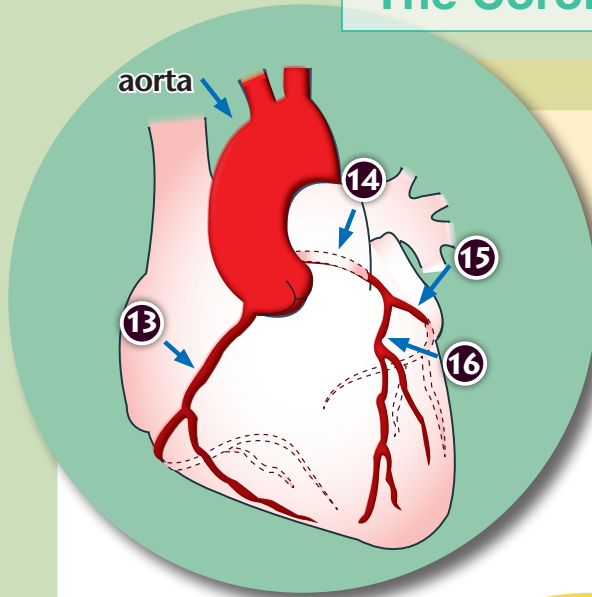


The Structures of the Heart 心臟結構

The Heart



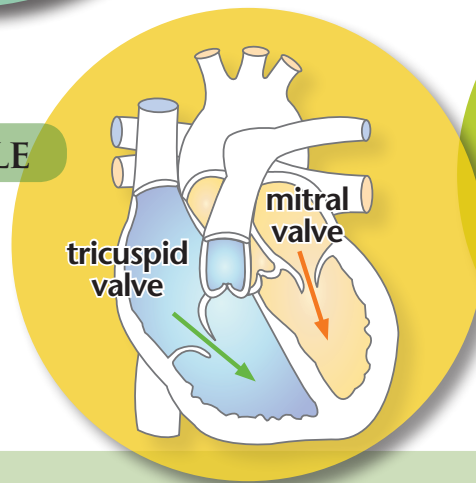
The Coronary Arteries



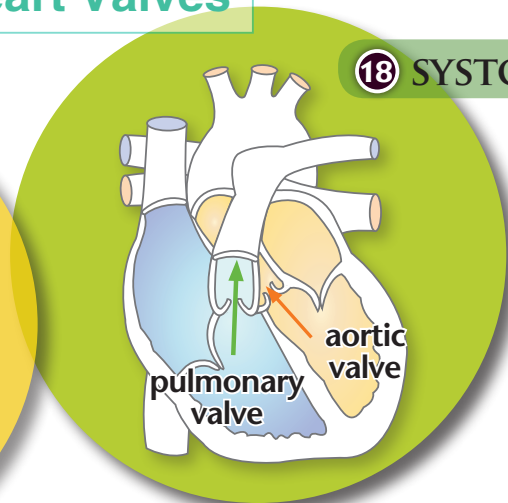
- 13 right coronary artery (RCA)
- 14 left coronary artery (LCA)
- 15 circumflex artery (CX)
- 16 left anterior descending artery (LAD)

The Heart Valves

17 DIASTOLE



18 SYSTOLE



ESP Focus

1. **superior vena cava** [suˈpiəriə] [ˌvɪnəˈkeɪvə] *n.* 上腔靜脈
2. **inferior vena cava** [ɪnˈfɪəriə] [ˌvɪnəˈkeɪvə] *n.* 下腔靜脈
3. **right atrium** [raɪt] [ˈetɹiəm] *n.* 右心房
4. **tricuspid valve** [traɪˈkʌspɪd] [vælɪv] *n.* 三尖瓣
5. **right ventricle** [raɪt] [ˈventrɪkəl] *n.* 右心室
6. **pulmonary valve (pulmonic valve)** [ˈpʌlməˌneɪɪ] [vælɪv] ([pʌlˈmənɪk] [vælɪv]) *n.* 肺動脈瓣
7. **pulmonary artery** [ˈpʌlməˌneɪɪ] [ˈɑːtəri] *n.* 肺動脈
8. **left atrium** [left] [ˈetɹiəm] *n.* 左心房
9. **mitral valve (bicuspid valve)** [ˈmaɪtrəl] [vælɪv] ([baɪˈkʌspɪd] [vælɪv]) *n.* 僧帽瓣；二尖瓣
10. **left ventricle** [left] [ˈventrɪkəl] *n.* 左心室
11. **aortic valve** [eɔˈtɪk] [vælɪv] *n.* 主動脈瓣
12. **aorta** [eɔˈtə] *n.* 主動脈
13. **right coronary artery (RCA)** [raɪt] [ˈkɒrəˌneɪɪ] [ˈɑːtəri] *n.* 右冠狀動脈
14. **left coronary artery (LCA)** [left] [ˈkɒrəˌneɪɪ] [ˈɑːtəri] *n.* 左冠狀動脈 (亦稱為 left main coronary artery, 縮寫為 LMCA)
15. **circumflex artery (CX)** [ˈsɜːkəmˌfleks] [ˈɑːtəri] *n.* 迴旋動脈
16. **left anterior descending artery (LAD)** [left] [ænˈtɪəriə] [dɪˈsendɪŋ] [ˈɑːtəri] *n.* 左前降枝動脈
17. **diastole** [daɪˈæstəli] *n.* 心臟舒張
18. **systole** [ˈsɪstəli] *n.* 心臟收縮

Admission Interview

Mr. Brown, a 52-year-old, is admitted to the **unit*** from the emergency room.

N: Nurse P: Patient

N: Hello, Mr. Brown. I'm your day **shift**¹ nurse. Would you mind if I asked you a few questions?

P: No, not at all.

N: What brought you to the emergency room yesterday?

P: I had **severe**² chest pain yesterday morning at 10.

N: Did you have any other **symptoms**³ **besides**⁴ chest pain?

P: Yes. I **sweated**⁵ a lot and felt **short of breath**.* I thought that I was going to **faint**.⁶

N: Have you ever had this kind of experience before?

P: Yes. I have had **chest tightness**.* But I really felt **uncomfortable**⁷ yesterday.

N: Have you ever had a **checkup**⁸ for this problem?

P: No. It didn't seem serious enough to see a doctor.

N: Do you **suffer from**⁹ **diabetes**.* **high blood pressure**.* or **kidney disease**?*

P: Luckily, no.

N: How about a **stroke**?*

P: Never.

N: Then what about your family?

P: No, they haven't had any serious diseases either.



Word Bank

1. **shift** [ʃɪft] *n.* 輪班；班別
2. **severe** [sə'veɪr] *adj.* 嚴重的；劇烈的
3. **symptom** ['sɪmptəm] *n.* 症狀
4. **besides** [br'saɪdz] *prep.* 除……之外
5. **sweat** [swet] *v.* 流汗
(cold sweats = diaphoresis 盜汗；冒冷汗)
6. **faint** [feɪnt] *v.* 暈倒
7. **uncomfortable** [ʌn'kʌmfə'təbəl] *adj.* 不舒服的
8. **checkup** ['tʃekʌp] *n.* 身體檢查
9. **suffer from** ['sʌfə] [frəm] *phr.* 罹患（疾病）

ESP Focus

* **cardiovascular** [ˌkɑːdiəʊ'veɪskjələ] *adj.* 心血管的

* **unit** [juːnɪt] *n.* （此指）病房

* **short of breath** [ʃɔːt] [əv] [breθ] *phr.* 呼吸急促的（SOB）

* **chest tightness** [tʃest] [ˈtaɪtnɪs] *n.* 胸悶

* **diabetes** [ˌdaɪə'bitɪz] *n.* 糖尿病

* **high blood pressure** [haɪ] [blʌd] [ˈpreʃə] *n.* 高血壓

* **kidney disease** ['kɪdnɪ] [dɪ'zɪz] *n.* 腎臟疾病

* **stroke** [stroʊk] *n.* 中風

Nursing Notes I

C/O occasional chest tightness over past few years. Did not see a doctor because felt not serious. Had chest pain, cold sweats, and difficulty breathing. Felt faint at work yesterday around 10:00 a.m.

個案主訴過去幾年偶有胸悶情形，但因不嚴重而未曾就醫。昨天早上十點左右上班時，感到胸口痛、冒冷汗、呼吸困難、快暈倒等情形。

Writing Nurse's Notes:

◆ Tip because 子句的寫法：

because 子句與主要子句主詞相同，則可省略主詞；若兩者主詞不同，則保留（若主要子句的主詞明確，亦可同時省略）。

例： The patient did not see a doctor because he felt it was not serious.

→ Did not see a doctor because felt not serious.

註： 合併省略主詞與 be 動詞 (it was) 之寫法；“see a doctor” 為固定用法，指「就醫」，a 不能省略。

醫護縮寫辭典：

- C/O = complain of 抱怨（相反詞：No C/O）

Your Turn:

1. The patient came to the ER because he had chest tightness.

2. The patient came to the hospital because the pain got worse.

3. The patient complained of pain in the stomach.



Listening Practice I Track 12

Listen to the following sentences (1–5) and match them with the corresponding questions:

- _____ Have you ever had trouble with your chest before?
- _____ Besides chest pain, did you have any other symptoms?
- _____ What brought you to the emergency room yesterday?
- _____ Have you or anyone in your family ever had high blood pressure?
- _____ Have you ever seen a doctor for your chest problem?

Hospitalization

It's three p.m. The nurse is **recording**¹ Mr. Brown's **intake*** and **output**.*

N: Mr. Brown, how is everything going?

P: Fine. Thank you.

N: Where is the **sheet**² for recording things you eat and drink?

P: It's right here (*hands the sheet to the nurse*).

N: Have you forgotten anything?

P: No, I don't think so.

N: Good. Please continue to **keep track of**³ your diet. Remember to avoid oily or salty food.

P: OK. What kinds of food are **considered**⁴ salty?

N: Foods that are canned, preserved, or **processed**⁵ usually have lots of salt.

P: What a **pity**.⁶ I really like those foods.

N: **Except for**⁷ the **urine*** in the **container**⁸ in the restroom, have you forgotten to **collect**⁹ any other urine?

P: Yes. I went to the restroom while I was at the **X-ray*** department this morning. I forgot then.

N: Have you had a bowel movement today?

P: Not yet.

N: Are you still feeling chest tightness or chest pain? How about other symptoms?

P: No.

N: Very good. I'll bring your evening medication later.

P: Thank you.



Word Bank

1. **record** [rɪˈkɔrd] *v.* 記錄
2. **sheet** [ʃit] *n.* 表格；單子
3. **keep track of** [kip][træk] [əv] *phr.* 記錄；追蹤
4. **consider** [kənˈsɪdər] *v.* 認為；把……視為
5. **process** [ˈprɑːses] *v.* 處理；加工
6. **pity** [ˈpɪti] *n.* 可惜；憾事
7. **except for** [ɪkˈsept][fər] *phr.* 除了……之外
8. **container** [kənˈteɪnər] *n.* 容器
9. **collect** [kəˈlekt] *v.* 收集

ESP Focus

- * **intake** [ˈɪn.tek] *n.* 攝入
- * **output** [ˈaʊt.pʊt] *n.* 排出
- * **urine** [ˈjʊrɪn] *n.* 尿
- * **X-ray** [ˈeks.re] *n.* X光；X光檢查

bed pan 便盆



urinal 尿壺

Nursing Notes II

Low-salt diet suggested. Told to avoid canned, preserved, and processed foods. OOB to restroom ad lib independently without any problems. I/O: -210. Will keep observing.

建議採低鹽飲食。告知避免吃罐頭、醃漬及加工食物。可自行下床解尿。I/O: -210。將繼續觀察。

Writing Nurse's Notes:

◆ **Tip** 主動改被動及省略 be 動詞的寫法：

例：The nurse suggested a low-salt diet. → Low-salt diet suggested.

註：a(n)、the、by the nurse、by the patient、the patient's、his (her) 等通常予以省略。



醫護縮寫辭典：

- OOB = out of bed 下床 • ad lib = at will 任意
- I/O = intake and output 攝入與排出量
- I/O: -210. = Intake is 210 cc less than output. 攝入少於排出 210 cc。

Your Turn:

1. Output is 185 cc more than intake.

2. The nurse oriented the patient.

3. The nurse removed the drainage tube.

Listening Practice II Track 14

Listen to the following questions (1–5) and match them with the corresponding answers:

_____ I haven't passed any stool yet.

_____ Not really. I feel OK.

_____ It's right here, Nurse.

_____ Canned, preserved, and processed foods are some examples.

_____ Yes, I have. I'll try to remember from now on.

Discharge Teaching

Mr. Brown is resting in bed. The nurse is preparing him for discharge.

N: Congratulations! You'll be discharged tomorrow.

P: Thank you.

N: Do you remember how to take the medication?

P: You mean the **tablets*** I put under my **tongue**?*

N: Yes. Do you remember what you need to **pay attention to**?¹

P: I have to **carry**² them with me. That way, if I have chest pain, I can take one.

N: Don't forget to sit or lie down. And what if the pain doesn't go away?

P: Take another after five minutes. If I need the third tablet, I have to come back **immediately**.³

N: Very good. Do you know where to keep the medication?

P: Yes, in a cool and dry place. It must also be **kept out**⁴ of the **reach**⁵ of children.

N: Right. And keep it in a **tightly**⁶ **capped**⁷ dark glass bottle.

P: I will.

N: How long does the medication **remain**⁸ **effective**?⁹

P: For six months only. To **judge**¹⁰ whether it has gone bad, check its color, **fragility**,¹¹ and taste.

N: How do these tablets taste when they're fresh?

P: They cause a **burning sensation*** when they're placed under the tongue.

N: Very good.



Word Bank

1. **pay attention to**
[pe] [ə'tenʃən] [tu] *phr.* 注意
2. **carry** ['kæri] *v.* 攜帶
3. **immediately** [ɪ'midiətli]
adv. 馬上；立刻
4. **keep out** [kip] [aʊt]
phr. 遠離
5. **reach** [ritʃ]
n. (肢體所及之) 範圍
6. **tightly** ['taɪtli] *adv.* 緊緊地
7. **cap** [kæp] *v.* 蓋
8. **remain** [ri'men]
v. 保持；仍是
9. **effective** [ɪ'fektɪv]
adj. 有效的
10. **judge** [dʒʌdʒ] *v.* 判斷
11. **fragility** [frə'dʒɪləti]
n. 脆弱；易碎性

ESP Focus

- * **tablet** ['tæblɪt] *n.* 藥片
- * **tongue** [tʌŋ] *n.* 舌頭
- * **burning sensation**
['bɜːnɪŋ] [sen'seɪʃən] 燒灼感

Nursing Notes III

Will be discharged tomorrow. Gave instructions for NTG usage. Patient correctly stated instructions about NTG.

預計明天辦理出院，給予衛教 NTG 藥物，病患可正確說出 NTG 藥物之用藥須知。

Writing Nurse's Notes:

◆ **Tip** "Patient correctly stated ..." 指病人完全理解衛教，並能正確描述。

例：Patient correctly stated instructions about NTG.

醫護縮寫辭典：

- NTG = nitroglycerin 硝基甘油



Your Turn: (完成句子)

1. Taught side effects of sleeping pills.

Patient _____

2. Taught restrictions on diet and exercise.

Patient _____

3. Taught importance of hand exercises.

Patient _____

Listening Practice III Track 16

Listen to the following questions (1–5) and choose the correct answers:

- | | |
|---|---|
| 1. <input type="checkbox"/> A. In a hot and humid place
<input type="checkbox"/> B. In a small glass bottle
<input type="checkbox"/> C. In a cool and dry place | 2. <input type="checkbox"/> A. When he needs to take the third tablet
<input type="checkbox"/> B. When he feels a burning sensation
<input type="checkbox"/> C. When the medication is opened |
| 3. <input type="checkbox"/> A. He can tell by its color and smell.
<input type="checkbox"/> B. He can tell by its taste and fragility.
<input type="checkbox"/> C. Only doctors and nurses can tell the difference. | 4. <input type="checkbox"/> A. For six weeks
<input type="checkbox"/> B. For six months
<input type="checkbox"/> C. For six years |
| 5. <input type="checkbox"/> A. Raise his arms <input type="checkbox"/> B. Take a walk <input type="checkbox"/> C. Lie down immediately | |

Grammar Focus



現在完成式 have + V-pp

最近發生、完成的動作	<p>例： Have you already quit smoking?</p> <p>例： I've just finished taking the patient's vital signs.</p> <p>註： 常與 already (已經)、just (剛剛)、recently (最近) 等副詞連用。</p>
表示「經驗」	<p>例： Have you ever had a checkup for this problem?</p> <p>例： I've visited some clinics near my house.</p>
持續到現在的狀態或動作	<p>例： Mr. Chen has had a cough for a long time.</p> <p>例： The patient has been hospitalized since March.</p> <p>註： 常與「for + 一段時間」、「since + 過去某個時間點」等連用。</p>

Your Turn:

- Have you _____ that Mr. Lin died of lung cancer?
A. hear B. heard C. hearing
- The patient _____ from the operating room.
A. has just returned B. has ever returned C. has been returning
- How long have you _____ antibiotics?
A. ever taken B. be taking C. been taking
- She has worked for the company _____ last year.
A. before B. since C. for

Useful Expressions

How to Take Medicine

Put it under your tongue.
Take it with meals/water.
Take half a tablet each time.
Take it twice/three times a day.
Remember to take your medicine on time.



How to Store Medicine

Keep it {
in the refrigerator.
out of the sun.
in a cool and dry place.
in a tightly capped bottle.
out of the reach of children.



Admission Note 入院記錄

Chief Complaint (CC): Progressive SOB for about three days before admission.

Present Illness (PI):

The 52 y / o male patient was diagnosed with diabetes mellitus (DM) and hypertension (HTN / HT). He has been taking medication and paying follow-up visits regularly at our outpatient department (OPD). The patient had a non-ST-elevation myocardial infarction (NSTEMI) three months ago. A coronary angiography was suggested, but his family refused, opting for medicine therapy instead. A thallium scan revealed ischemia in the apical segment and an infarction in the lateral segment.

The patient appeared to have mild chest tightness without chest pain. The amount of urine he was producing was at a normal level, and he did not have lower leg edema. He has been coughing up small amounts of sputum for several days. There were no signs of fever, nausea, or radiation pain. At our ER, an electrocardiogram (ECG / EKG) initially revealed sinus tachycardia. This changed to atrial fibrillation (Af) with a rapid ventricular response (RVR) later. However, the patient was in a stable hemodynamic condition. An irregular heartbeat with a systolic murmur, grade II / VI, and an elevated level of cardiac enzymes were also noted. The patient was admitted to our ward for further evaluation and treatment to rule out a non-ST-elevation MI with acute pulmonary edema.

Medical Terminology

Signs and Symptoms (S/S)	Personal History
progressive shortness of breath (SOB) 漸進的呼吸短促	diabetes mellitus (DM) 糖尿病
mild chest tightness 輕微的胸悶	hypertension (HTN / HT) 高血壓
chest pain 胸痛	non-ST-elevation myocardial infarction (NSTEMI) 非 ST 段上升的心肌梗塞
radiation pain 輻射痛	Diagnostic Test
cough 咳嗽	coronary angiography 冠狀動脈血管攝影術
sinus tachycardia 竇性心搏過速	thallium scan 鉍掃描
irregular heartbeat 心跳不規則	electrocardiogram (ECG / EKG) 心電圖
atrial fibrillation with rapid ventricular response (Af with RVR) 心房纖維顫動且心室反應快速	Diagnosis
systolic murmur grade II / VI 第二級 (分六級) 的收縮性心雜音	non-ST-elevation MI 非 ST 段上升的心肌梗塞
elevated level of cardiac enzymes 心肌酵素上升	Complications
	acute pulmonary edema 急性肺水腫
	Related Terms
	ischemia in apical segment 心尖部位缺血
	infarction in lateral segment 心臟側面梗塞

The Cardiovascular System

The cardiovascular system is composed of the heart, blood vessels, and blood. From the heart, blood travels into the arteries and their smaller branches. It continues to the **capillaries**.* Then, it moves to the branches of the vein structure before returning to the heart. The heart serves as a pump. Arteries carry blood from the heart to body organs and tissue. Veins carry blood back to the heart.

* **capillary** ['kæpə,lɛrɪ] *n.* 微血管

Blood leaves the left ventricle and goes through the arteries via the aorta, also called the great artery. The superior vena cava drains blood from the upper portion of the body, and the inferior vena cava carries blood from the lower part of the body to the right atrium. **Deoxygenated*** blood then moves into the right ventricle, which contracts to send the blood to the pulmonary artery.

* **deoxygenated** [di'ɒksɪdʒə,netɪd] *adj.* 缺氧的

The heart wall is made up of three layers. The first is the **endocardium***, which is the membrane that lines the interior of the heart. The second and thickest layer is the **myocardium***, or the muscle of the heart. The **epicardium*** forms the third and outermost layer. Surrounding the heart is the **pericardial sac***, also known as the **pericardium**.*

* **endocardium** [ˌendo'kɑrdiəm] *n.* 心內膜

* **myocardium** [ˌmaɪə'kɑrdiəm] *n.* 心肌

* **epicardium** [ˌepə'kɑrdiəm] *n.* 心外膜

* **pericardial sac** [ˌperə'kɑrdiəl] [sæk]
n. 心包囊

* **pericardium** [ˌperə'kɑrdiəm] *n.* 心包

There are four chambers in the heart. They are the right atrium, right ventricle, left atrium, and left ventricle. The **interatrial septum*** separates the left and right atrium. The **interventricular septum*** divides the left and right ventricle. Both prevent the blood in the two sides of the heart from mixing.

* **interatrial septum** [ˌɪntə'reɪtriəl] ['septəm] *n.* 心房中隔

* **interventricular septum** [ˌɪntə'ven'trɪkjələ] ['septəm] *n.* 心室中隔

The tricuspid valve prevents blood from flowing back into the right atrium. The pulmonary valve closes as soon as the right ventricle has finished emptying itself. This prevents blood on its way to the lungs from returning to the ventricle. The mitral valve, also called bicuspid valve, is made of two heavy flaps. It closes when the left ventricle begins its contraction. This keeps blood from returning to the left atrium. The aortic valve prevents blood from returning to the left ventricle.

The heart usually beats 60 to 100 times per minute. This is referred to as the pulse rate. The contraction of the heart is called systole. It is followed by a short resting period known as diastole.

AFTER YOU READ

Exercise I Write the correct answer to each question.

- ___ 1. Which one of the following does NOT belong to the cardiovascular system?
A. Heart B. Liver C. Blood vessels D. Blood
- ___ 2. Which one of the following delivers blood toward the heart?
A. The aorta and arteries B. Arterioles
C. Capillaries D. Superior and inferior vena cava
- ___ 3. What does the term “deoxygenated blood” mean?
A. Blood filled with oxygen from the lungs
B. Blood that has no oxygen
C. Blood without the formed elements (RBCs, leukocytes, platelets)
D. Blood carrying signal molecules

Exercise II Fill in the blanks and circle the correct answer.

1. The _____ is also called the great artery.
2. The _____ can be found all around the outer part of the heart.
3. A heart that beats over 100 times per minute is considered **normal** / **abnormal**.

Exercise III Answer the questions.

1. Put these blood vessels in order from the biggest to the smallest.

A. Capillaries	B. Arteries	C. Aorta	D. Arterioles
----------------	-------------	----------	---------------

___ → ___ → ___ → ___

2. What happens after blood is pumped into the body from the left ventricle?
