

ADAPTIVE LEARNING

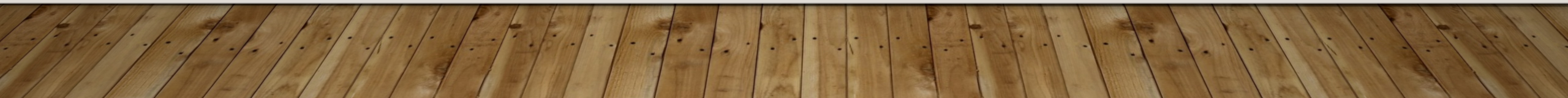
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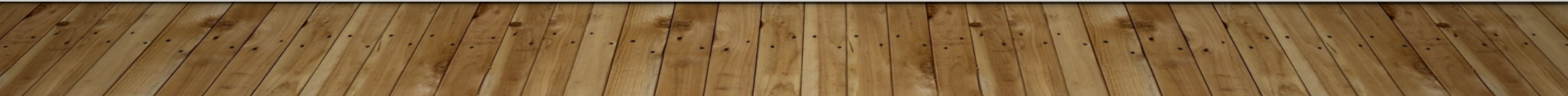
Acknowledgment: All the case examples were taken from individual teachers from UNSW, Smart Sparrow and BestNetwork with permission.

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WHAT IS ADAPTIVE LEARNING?



ABOUT ADAPTIVE LEARNING, ...

- Adaptive learning is a type of customized learning process?
- Adaptive learning is only possible with e-learning technology?
- Adaptive learning is where learners moving through certain learning paths based on their actions within the course?
- Adaptive learning uses assessment to organize the materials?
- Learners are the major users of adaptive learning?

EXAMPLES:

- STEM – readiness test
- Nursing – Providing contents
- Lab – virtual practice
- Medicine – case study

Example 1: **Medicine** – Readiness assessment (MCQ)

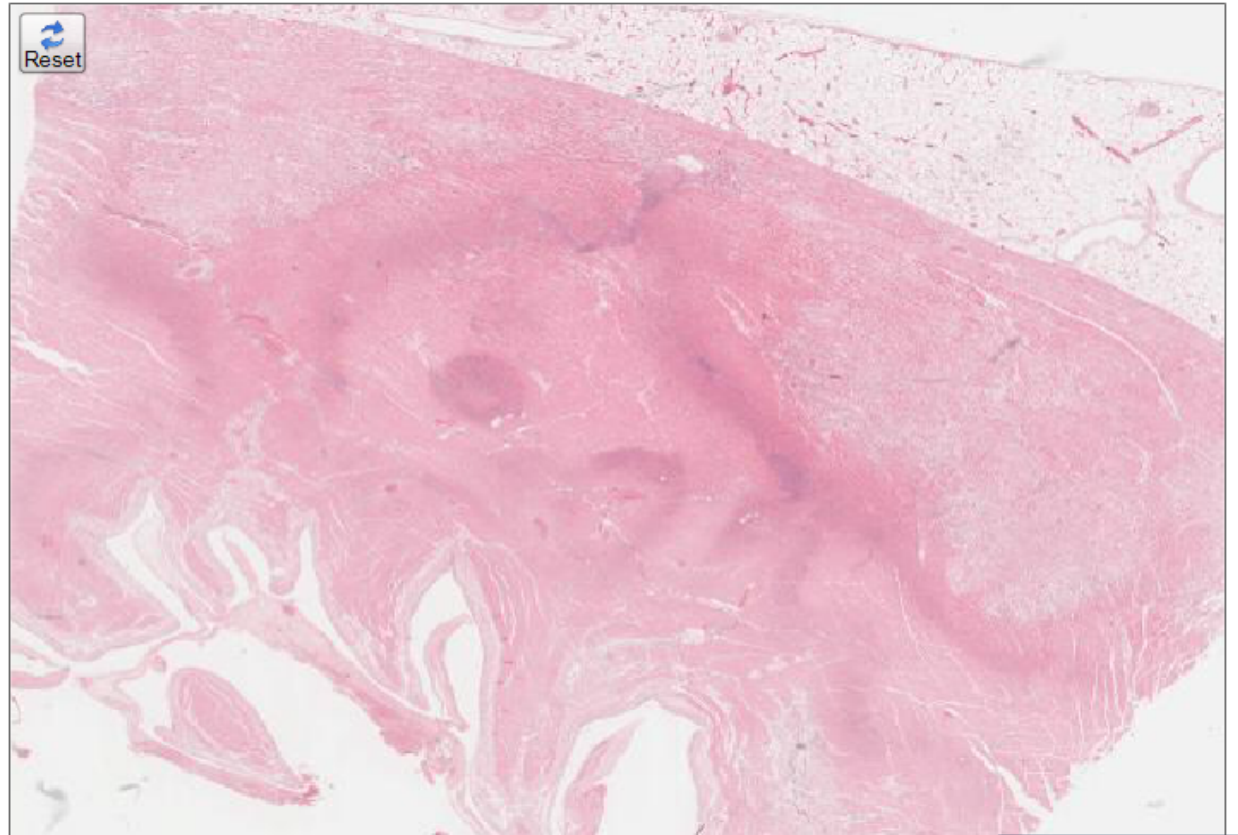


Question

The man from whom this tissue was obtained at autopsy died within the first week following an acute myocardial infarction.

All of the following complications are likely causes of death in this case, **EXCEPT**:

- ☐ Ventricular fibrillation
- ☐ Cardiac rupture
- ☐ Massive pulmonary embolism
- ☐ Cardiogenic shock
- ☐ Fibrinous pericarditis



Check



The region of **pericardial adipose tissue, vessels and nerves** is highlighted in **green**.

The region of **fibrinous pericarditis** is highlighted in **red**.

The zone of early **granulation tissue**, growing in from the **epicardial surface** is highlighted in **blue**.

The zone of **myocardial necrosis** and inflammation is highlighted in **aqua**.

The region of **mural thrombus** is highlighted in **yellow**.



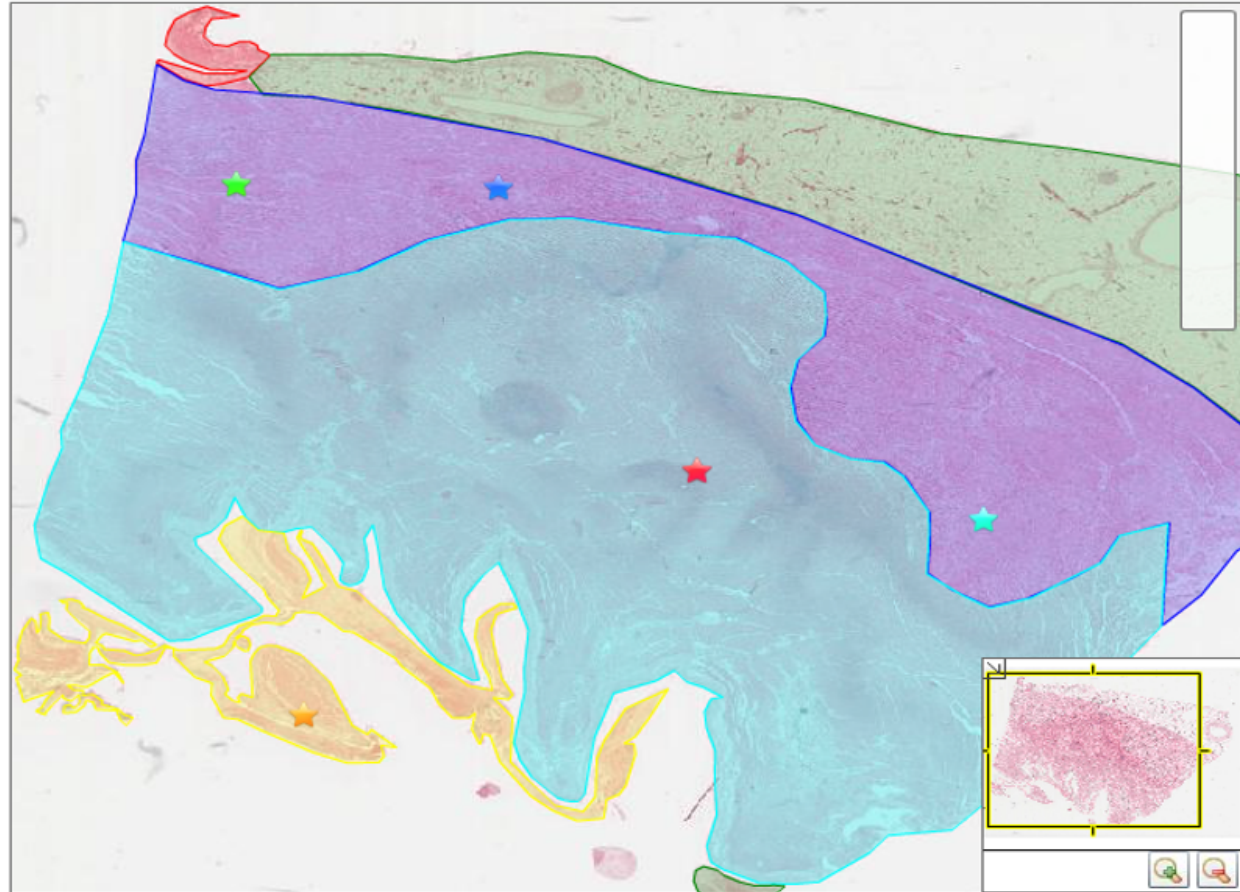
Watch a video demonstration of the Histopathology in this case.

All three layers of the heart are present in this section, with the pericardium at the top and the endocardium at the bottom. Fibrinous pericarditis is evident in the region highlighted in red. This is a response to necrosis of the underlying myocardium.

There is a pale zone of myocardium highlighted in blue, where new blood vessels and fibroblasts have grown in from the pericardial surface to form very early granulation tissue.

A mural thrombus is adherent to the endocardial surface.

Please click '**Next**' to continue.



Sign out

Restart



Next



Example: **Nursing** – contents, embedded video, questions after video



Patient Rights



International Seminar on Patient's Rights ... ➔



Australian Health Ministers endorsed the charter as the **Australian Charter of Healthcare Rights** for use across the country in 2008.

The Charter applies to all health settings across Australia, including public & private hospitals, general practice and other community environments.

It allows patients, consumers, families, carers and service providers to have a common understanding of the **rights of people receiving health care**.

Of the below list, what best describes examples of patient rights?

- ☐ Right to healthcare, dignity and must follow the medical advice given
- ☐ Right to respect, privacy and compliance with expert medical treatment
- ☐ Right to be included in decisions about own healthcare and have concerns addressed



Click the information icon for more information

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EXAMPLE: **NURSING** – CONTENTS, EMBEDDED VIDEO, QUESTIONS AFTER VIDEO

Ethics in Health Care



Within healthcare, what do you think is meant by the term ethics?

Enter Answer:

What do you think *morals* are?

Enter Answer:



Image source

Next

EXAMPLE: VIRTUAL LAB PRACTICE IN DRY LAB

SNP Virtual Lab.

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Instructions

The template DNA has already been loaded into the 96-well plate.

1. Add the following sequencing reagents:

- Buffer
- Sequencing Primer
- DNA Polymerase
- dNTPs
- ddNTPs

The plate will then be

Hint: You need to add buffer, sequencing primer, DNA polymerase, dNTPs and ddNTPs into the your sample tube.

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EXAMPLE: MEDICINE – CASE STUDY - INSTRUCTIONS

Leukaemia Module

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Haematology Case Studies

You have two options to start using this module - either:

Start the case study straight away OR

Review relevant learning material first before attempting to complete the case studies questions.

Make your selection below then click on **Go**.

- Go to Review Material - Leukaemia
- Go to Case Study 1 - 'Liam'
- Go to Case Study 2 - 'Patricia'
- Go to Case Study 3 - 'Skye'

Go

EXAMPLE: MEDICINE – CASE STUDY, CASE 1



Case Study 1

Haematology Case Study - Leukaemia

Below are the results of the full blood count- complete the table of results with your interpretation for each relevant parameter.

<u>Parameter</u>	<u>Result</u>	<u>Child Normal Range</u>	<u>Interpretation of Result</u>
RBC	2.6	$4.5 - 5.1 \times 10^{12}/L$	
Hb	73	112 - 165 g/L	
HCT	0.21	0.35 - 0.49	
MCV	79	80 - 100 fL	
MCH	28	26 - 32 pg	
MCHC	356	320 - 360 g/L	
WBC	25	$4.5 - 11.5 \times 10^9/L$	
Plat	78	$150 - 400 \times 10^9/L$	

*** Note:**

Type a one word answer, for example 'hypochromic'. If the result is within the reference range type 'normal'.

Next

DIAGNOSIS EXERCISES

- Solution Trace Graph
- Analytics of students' response
- Question explorer