

Mock PBL Scenario

Problem based learning (PBL) is a small group teaching style used as part of the curriculum in Glasgow for years 1, 2 and 3. It is divided into two 1-hour sessions a week, the first one titled the 'brainstorm' and the second titled 'feedback'.

PBL takes place in groups of 8-10 students with a facilitator, who will be a member of teaching staff from the University. These groups remain the same for each block (e.g. cardiovascular block) and typically change up in between.

Brainstorm Session

In the first session you and your group will be given a clinical scenario. As a group you then work through the following tasks:

1. Read the scenario
2. Identify any terms you do not understand and define them as a group
3. Identify a list of main issues brought up in the scenario (e.g. if the scenario was discussing heart failure, one of the topics you might want to consider would be anatomy of the heart)
4. Brainstorm what you already know about the main issues you have identified as a group
5. Create a set of questions that your group members are going to research and prepare answers to for the feedback session

The brainstorm session will be lead by a member of the group allocated as 'chairperson', and notes from the brainstorm are put up on whiteboards by a person allocated as 'scribe'. The facilitator is there to ensure you don't go off track and to make sure all of the key learning points are covered by the questions the groups comes up with at the end.

Feedback Session

The group and facilitator get back together at the end of the week to discuss what everyone managed to find out about the questions generated in the brainstorm. As a group, you work through the following tasks:

6. Feedback on the information that you collected throughout the week
7. Reflect on the scenario and how the group worked together as a whole

Worked Example of PBL

The paragraphs below give you an idea of the scenarios you might be presented with during the 'brainstorm' session of PBL.

A 44-year-old male presents to his GP with epigastric pain and weight loss for the past 6 weeks. The patient has no other medical conditions, but takes ibuprofen on a regular basis for back pain. He works full-time as a lawyer, which he finds stressful, and discusses not having much time to spend at home with his wife and young children. The patient smokes 20 cigarettes on a daily basis. On examination, the patient is very tender in the epigastric region, and the GP notices that his clothes appear loose.

The GP refers the patient for an urgent upper GI endoscopy, as they are concerned about the patient's weight loss.

The upper GI endoscopy reveals that the patient has a gastric ulcer, and the biopsy is positive for *H. Pylori*. When he returns to his GP to discuss the results, he is prescribed lansoprazole, clarithromycin and amoxicillin and asked to return in 4 weeks to discuss how he is improving.

We have put our own answers on the next page so you can see how a medical student might approach this scenario. However, before you look at how we approach it, have a go at trying it yourself!

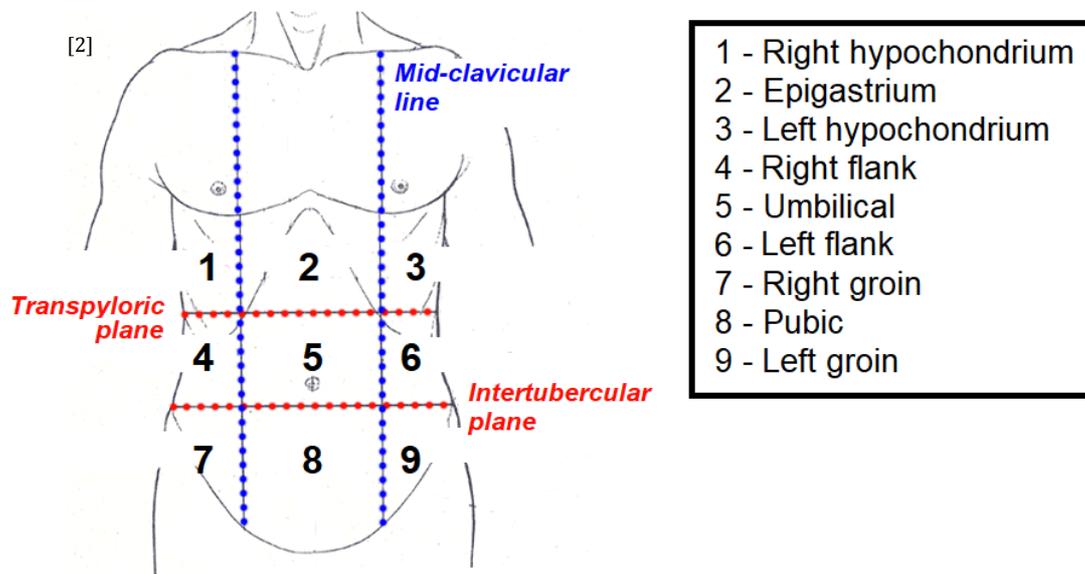
ACTIVITY: using the scenario above, try and work through some of the PBL brainstorm steps yourself! As a reminder, the steps are:

1. Read the scenario
2. Identify any terms you do not understand and define them
3. Identify a list of main issues brought up in the scenario
4. Brainstorm what you already know about the main issues you have identified
5. Create a set of questions that you're going to research and prepare answers to for the feedback session

Based, on the scenario we have given you, here's how a medical student might have approached this task.

After reading the scenario, the next thing to do is consider any words that we don't understand. In this scenario, these might be:

- Epigastric: a specific region of the abdomen (see area 2 on the image below)
- Endoscopy: a medical investigation where a long, thin, flexible tube with a camera on the end is passed through the mouth and down into the stomach
- H. Pylori: a type of bacteria that can infect the stomach (full name: helicobacter pylori) and cause gastric ulcers
- Lansoprazole: a medication classified as a 'proton pump inhibitor' that works to reduce the amount of acid produced by the stomach
- Clarithromycin: an antibiotic
- Amoxicillin: an antibiotic



After defining any words you were unsure of, it would be time to decide what you think are the main issues. In this case, we have highlighted what we feel are the important points and used this to generate our list of main issues below.

A 44-year-old male presents to his GP with **epigastric pain** and **weight loss** for the past 6 weeks. The patient has no other medical conditions, but takes **ibuprofen** on a regular basis for back pain. He works full-time as a lawyer, which he finds **stressful**, and discusses not having much time to spend at home with his wife and young children. The patient **smokes** 20 cigarettes on a daily basis. On examination, the patient is very tender in the epigastric region, and the GP notices that his clothes appear loose.

The GP refers the patient for an urgent **upper GI endoscopy**, as they are concerned about the patient's weight loss.

The upper GI endoscopy reveals that the patient has a **gastric ulcer**, and the biopsy is positive for ***H. Pylori***. When he returns to his GP to discuss the results, he is prescribed **lansoprazole**, **clarithromycin** and **amoxicillin** and asked to return in 4 weeks to discuss how he is improving.

There are lots of issues you could come up with based on this scenario. Some of the main issues we thought of for this scenario include:

- Surface anatomy of the abdomen
- Acid production in the stomach
- Causes/risk factors for developing a gastric ulcer
- Signs and symptoms of a gastric ulcer
- *H. Pylori* testing and microbiology
- Diagnosing a gastric ulcer
- Treatment of a gastric ulcer

ACTIVITY: based on the main issues we have suggested, and ones that you come up with yourself, create a list of up to 6 questions that you feel are the most important. Try to be as specific as you can with your questions, as it makes it much easier when doing the research!