

Unit 5: Infections

A. Fever

A medical student has made some language notes on a case report.

Case 55

A 26 year old man presented with a fever which he had had for three days. On the third day he had a severe attack of fever with sweating and rigors. The only past history of relevance was hepatitis four years earlier and glandular fever at the age of 18 years. He had returned from Africa three weeks previously.

Fever = **pyrexia** (also remember PUO Pyrexia of unknown origin)

Fever also known as **temperature**

“I’ve got a temperature.”

Adjectives = **feverish/febrile** and **pyrexia**

Opposites = **afebrile/apyrexial**

Some symptoms of fever

Sweating

Rigors (severe shivering and sensation of coldness, also known as the chills.)

B. Bacteria & Antibiotics

- A When the microscope was invented it became possible for scientists to see microscopic organisms. For the first time they were able to confirm that it was pathogens and not smelly gases that caused illness. They developed the Germ Theory of disease.
- B Germ Theory changed attitudes to hygiene. It has made towns very different from the dirty places they were before. In hospitals, Florence Nightingale applied Germ Theory to nursing practices and made new hygiene rules. She showed that clean sewers, ventilation and disinfected wards were equally as important as the treatment of patients.
- C Once they knew that germs existed, scientists could work on ways to kill them. Germ Theory led to medicines which were called antibiotics. One of the first antibiotics was penicillin. Methicillin is a modern development of penicillin.
- D Although antibiotics kill bacteria, they don’t kill all bacteria. Some bacteria are drug-resistant. They can survive the antibiotics and they also produce more bacteria that are also resistant.
- E One problem is that antibiotics are used too much. Firstly, they have been used to treat viral illnesses, even though antibiotics do not kill viruses. They are also used in farming and we take a lot of antibiotics into our bodies through our food.
- F One bacterium that can resist methicillin is MRSA, otherwise known as Methicillin Resistant Staphylococcus Aureus. When MRSA is present in a hospital full of sick people with weak immune systems it can cause deaths.

Comprehension

Match the following topics 1–6 with the correct paragraph A–F.

- | | |
|--|---------------------------------------|
| 1. The history of antibiotics. _____ | 4. A drug-resistant bacterium. _____ |
| 2. The misuse of antibiotics. _____ | 5. The true cause of illness. _____ |
| 3. The problem with antibiotics. _____ | 6. A theory that changed lives. _____ |

Vocabulary

Write ‘P’ next to the things that prevent the spread of bacteria and ‘H’ next to the things that help bacteria spread. The first one is done for you.

- | | |
|-------------------------------------|---------------------------------------|
| 1. Antibiotic resistance. _____ | 5. Contaminated dressings. _____ |
| 2. Spillage of bodily fluids. _____ | 6. The immune system. _____ |
| 3. An anti-microbial agent. _____ | 7. Susceptibility to infection. _____ |
| 4. A disinfected ward. _____ | |

Further vocabulary practice

Match the beginnings of the sentences 1–7 with the ends. The first one is done for a–g.

- | | |
|----------------------------------|-----------------------------|
| 1. The waste disposal bag | a. must be kept full. |
| 2. Fill a bucket | b. of disposable gloves. |
| 3. You must use a mop to | c. need to be replaced. |
| 4. The paper towels are gone and | d. needs emptying. |
| 5. You need two pairs | e. clean up any spillage. |
| 6. The liquid soap dispenser | f. detergent for the floor. |
| 7. We need a strong | g. with clean hot water. |

C. Microorganisms

Infections differ from other diseases in a number of aspects

- Most importantly, they are caused by living **microorganisms**-such as viruses or bacteria-that can be usually identified, thus establishing the etiology early in the illness. Many of these organisms, including bacteria, are sensitive to antibiotics and most infections are potentially **curable**, unlike many non-infectious degenerative and chronic diseases.
- **Communicability** is another factor which differentiates (tells apart) infections from non-infectious diseases. **Transmission** of pathogenic organism to other people, directly or indirectly, may lead to an **outbreak** or epidemic.
- Finally, many infections are preventable by hygienic measures, by vaccines (especially attenuated vaccines such as rubella vaccine) or by **drug prophylaxis** (for example chloroquine to prevent malaria).

Microorganisms

Microorganisms included bacteria, viruses, fungi, protozoa (such as the **parasite** that causes malaria). Another general word for these pathogens is **microbes**. Patients often refer or say as **germs** or **bugs**.

Notice the common expression for acquiring an **infectious disease**:

Could he have **caught** some disease from the dog?
picked up

I think I've caught the flu bug that going around.

D. Source and spread of infection

Here is an extract from a medical textbook.

Infection may originate from the patient (**endogenous**), usually from skin, nasopharynx or bowel, or from outside source (**exogenous**), often another person who may be either suffering from an infection or **carrying** a pathogenic microorganism. **Carriers** are usually healthy and may harbor the organism in the throat (for example, diphtheria), bowel (salmonella), or blood (hepatitis B or HIV). Non-human sources of infection include water (e.g. cholera), milk (e.g. tuberculosis), food (e.g. botulism) animals (e.g. rabies), birds (e.g. psittacosis) and also in the soil (e.g. legionella - **Legionnaires; disease**).

The **incubation period** is the period between the invasion of the tissues by pathogens and the appearance of clinical feature of infections. The **period of infectivity** is that time that the patient is infectious to others.

E. Practice

1. Complete the case report on the patient.

CASE 45

On examination, he looked unwell. His pulse rate was 100/minute. He had a palpable spleen. The combination of (1) _____ and (2) _____ in a patient who has recently returned from Africa strongly suggests a diagnosis of malaria. The (3) _____ period is usually 10-14 days. In this case, the patient was admitted he had not been taking (4) _____ regularly. The diagnosis was confirmed by the presence of (5) _____ in his blood film.

2. Match the two parts of the sentences.

1. 1988 saw England launch of live attenuated
2. Chickenpox (varicella) is a common infectious
3. Rabies has an incubation
4. The patient remained febrile
5. He was admitted with a four-day history of influenza-type symptoms of fever with
6. Quite a proportion of patients who recovered from hepatitis B
7. The central part of Africa is in the midst of an epidemic
8. Measles (Rubeola) is most
9. Lyme disease is caused by transmission
10. PUO stands for

- A. period ranging for four days to many months.
- B. rigors, myalgia and general malaise.
- C. becomes carries of the virus.
- D. infectious during the catarrhal stage.
- E. disease of childhood.
- F. of AIDS.
- G. of *B. burgdorferi* from animal to man by ixodid ticks.
- H. with peaks of temperature of 39.5 Degrees Celsius.
- I. pyrexia of unknown origin.
- J. measles, mumps, and rubella (MMR) vaccine.

References:

Oxford English for Careers Nursing 1 Practice File © Oxford University Press 2011
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Student ID: _____ Name: _____ Section _____ No. _____

Rewrite the following paragraph in your own language (English).

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