



MYTH 3: Parenteral nutrition (PN) will give me an infection

FALSE

Being on parenteral nutrition will not necessarily cause a patient to have an infection.

Having a line directly into the bloodstream increases the risk of getting an infection as this provides a route into the body that bypasses all the normal protection mechanisms.

Good hygiene and following protocols is really important.

On average, if a patient is on home parenteral nutrition (HPN) for over 3 years it is possible that they may have 1 line infection.

1

WHY MAY PN BE ASSOCIATED WITH AN INFECTION?

- Parenteral nutrition solutions are either sterile solutions or have been made from sterile solutions in a clean environment (for more information see Myth 2).
- An infection can occur when bacteria enter the bloodstream or get attached to the 'line'.
- There are two main ways that this can happen:
 - **During connection or disconnection**
 - During the connection and disconnection process it is possible to accidentally touch part of the equipment or line and transfer bacteria onto parts where the PN infusion will flush them into the body.
 - Aseptic technique is a procedure that reduces the risk of this happening, this is done through preparing the area, handwashing, and through specific steps to avoid touching key parts of the equipment and line.
 - **From an infection in another part of the body**
 - When an individual has an infection some of the bacteria circulate in the bloodstream, if these attach to the feeding line they can multiply. When the PN is started this flushes them back into the circulation and causes the symptoms from the infection.

2

INFECTIONS DEEP DIVE

- Bacteria are everywhere. Some, like the bacteria found in the gut, are good for us, while others can be harmful. Bacteria, viruses, and other microorganisms that cause disease are called pathogens.
- The immune system is designed to fight pathogens and in most situations will effectively clear any harmful bacteria that enter the bloodstream.
- Any patient with an underlying condition may be at increased risk of infection for a number of reasons.
- An underlying immune condition, or drug therapy that reduces immune response, may lead to an increased susceptibility to infections.
- Having a medical device in place such as a venous access device (line) provides an entry point for bacteria into the body, this is why the use of aseptic technique is so important during connection, disconnection and line care.

MYTH 4

To be continued...