Antiseptics: sometimes the cause of infection

- Single-use containers are safer.

In late 2013, the US Food and Drug Administration (FDA) issued a warning about the possibility of bacterial contamination of antiseptic solutions (1).

Many infections caused by contaminated antiseptic solutions have been reported (1). The consequences ranged from localised infection at an injection site, to deep infections and even fatal septicemia.

The FDA analysed a series of reports including 4 deaths, 5 wound infections, 7 cases of peritonitis, 10 cases of septic arthritis, 14 catheter infections, 16 injection site infections, and 32 cases of bacteremia. These infections were confirmed to have been caused by a contaminated antiseptic solution. The products involved included all of the commonly used antiseptic agents: alcohol, iodophores, chlorhexidine, and quaternary ammonium compounds. The microorganisms involved were a variety of bacteria and mycobacteria (1).

The microorganisms were usually introduced into the antiseptic by diluting it with contaminated water, by inappropriate handling, or by storing it under non-sterile conditions. In a few cases, contamination occurred during the manufacturing process.

In practice. The use of an antiseptic is not a barrier to infection. It is better to avoid using and discard any antiseptic that has been stored or used under conditions that could result in contamination, in particular if it has been diluted with non-sterile water or stored inappropriately. Antiseptic solutions packed in single-use containers avoid this problem, provided they are not kept after opening.

Antithrombotic and cytotoxic drugs: too often fatal

- Anticoagulants, antiplatelet drugs and cancer drugs were the leading causes of drug-related hospital deaths in a study conducted in Bordeaux, France.

In France, national data on drug-related mortality are scarce (1). Extrapolating from data from other countries, a very approximate estimate is that about 20,000 hospitalised elderly or disabled patients die of adverse drug effects in France each year (1).

The Bordeaux regional pharmacovigilance centre conducted a retrospective cohort study over a one-year period, using the databases of two hospitals in the Aquitaine region, including Bordeaux University Hospital. It identified 66 patients whose death was attributed to a drug. 31 of these patients died from haemorrhaging during treatment with an anticoagulant and/or an antiplatelet drug (the drugs involved were not specified). The deaths of 16 other patients were attributed to cancer drugs (drug not specified) (2).

In practice. This local study serves as a reminder of how close an effective dose can be to a harmful dose for many drugs, particularly antithrombotic and cytotoxic drugs. It also underlines the urgent need for serious action to help healthcare professionals improve their practices in a tangible way.

Selected references from Prescrire’s literature search