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Inspection of instruments in the reprocessing cycle

The cleanliness and function of instruments should be inspected and checked after the cleaning step. Any deposits like lime scale or organic materials like blood and protein can impair the sterilization or disinfection procedure. This means the successful reduction or removal of **microorganisms** for potential cross infection cannot be guaranteed (Parker 1995, Alfa 1998, Rutala 1998, Sehulster 2002, Favero 2001). This is because the disinfectant or steam (in case of a steam sterilizer) must come into direct contact with all surfaces of the instruments to be efficient. In the case of deposits, these can conceal bacteria and protein residues underneath, shielding them from the reprocessing procedure. If these bacteria and protein residues come into contact with the user or patient, the probability of adverse effects on patients health is there.

Corrosion of instruments is frequently underestimated

During the inspection of instruments, care must be taken that their surfaces are intact and not **corroded**. If instruments are corroded, this will result in surface changes that can affect both the patient and the user. These changes may make it impossible to reliably carry out controlled reprocessing. Pitting corrosion can also take root under the corroded surface; microbes multiply underneath the corroded area, but coatings also remain in place (1).

If the affected instrument is not repaired, the corrosion will continue to develop, possibly compromising the instrument's function or causing irreparable damage as a result.

If the affected instruments are sterilized in the steam sterilizer, the corrosion can be transferred by water and steam to other medical devices and equipment. The chamber in the autoclave can also be affected (1).

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