Checklist: Providing Implants, With Appropriate Infection Prevention Practices

Although insertion and removal of implants are minor surgical procedures, careful infection prevention procedures must be followed with every client. Infection prevention during insertion and removal involves aseptic technique (performing the procedures under sterile conditions). Proper infection prevention procedures minimize the chances of blood-borne infections such as HIV and hepatitis B and of infections at the insertion site. Infection at the insertion site may require early removal or cause spontaneous expulsion of implants. Generally, sterilization is required for instruments such as scalpels and needles that touch tissue beneath the skin. If sterilization is not possible or practical, instruments must be high-level disinfected.

Family planning providers can use this checklist to help ensure that the procedure is done safely:

**Getting Ready**
- Have the client wash her entire arm and hand (the one she uses less often) with soap and water, and dry with clean towel or air-dry.
- Cover the procedure table and arm support with a clean cloth.
- Ask the client to lie on her back on the table so that the arm in which the implants will be placed is turned outwards and bent at the elbow and is well supported.
- Prepare a clean instrument tray and open the sterile instrument pack without touching the instruments or other items.
- For *Jadelle* and *Sino-Implant (II)*, carefully open the sterile pouch containing the implants by pulling apart the sheets of the pouch and, without touching the rods, allowing them to fall into a sterile cup or bowl.
- For *Implanon*, remove the sterile applicator with the preloaded implant from the package by allowing it to fall on the sterile tray without touching it.

**Before Insertion**
- Wash hands thoroughly with antiseptic soap and water and dry with clean towel or air-dry.
- Put sterile or high-level disinfected gloves on both hands before each procedure. (If using gloves with powder, rinse them in sterile or boiled water before starting the procedure because the powder may fall into the insertion site and cause scarring.)
- Clean the insertion site with a cotton or gauze swab soaked in antiseptic solution and held in a sterile or high-level disinfected forceps.
- Use sterile surgical drape with a hole in it to cover the arm. The hole should be large enough to expose the entire area where the implants will lie once they are inserted. (If sterile drape is not available, use a clean drape or linen that has been washed, dried, ironed, and stored in a clean closet.)
- When giving local anesthetic, use a new disposable syringe and needle, from a sealed package, if available. An auto-disable syringe is preferable.
During Insertion

_Jadelle_ and _Sino-Implant (II):

- To minimize risk of infection and/or expulsion, make sure that the ends of the rods nearest to the incision are not too close (not less than 5 mm) to the incision. If the tip of the rod protrudes from or is too close to the incision, it should be carefully removed and reinserted in the proper position. Also, to enable easy removal of both rods from a single incision, it is important that the ends of the rods closest to the incision are not farther apart, one from the next, than the width (not length) of one implant.
- While inserting the implants, try not to remove the trocar from the incision. Keeping the trocar in place minimizes tissue trauma, decreases the chances of infection, and minimizes insertion time.

_Implanon:

- After confirming that the rod is in the applicator, remove the needle shield. Without the needle shield, the implant can fall out, so keep the applicator in the upright position until the moment of insertion. If it falls out or if contamination otherwise occurs, use a new package with a new sterile applicator.

After Insertion

- Press down on the incision with gauze for a minute or so to stop any bleeding, and then clean the area around the insertion site with antiseptic solution on a swab.
- Use an adhesive bandage or surgical tape with sterile cotton to cover the insertion site. Check for any bleeding. Cover with a dry compress and wrap gauze around arm tight enough to provide some compression to minimize bleeding under the skin (hematoma), but not so tight that it will cause pain and paleness in the arm.
- Dispose of the single-use applicator (for _Implanon_) and used disposable syringes and needles in a puncture-resistant container.
- Immediately after inserting or removing the implants, decontaminate the trocar, scalpel, syringe and needle, and any other nondisposable instruments by soaking them in a 0.5% chlorine solution for 10 minutes. Decontamination makes them safer for final processing of the instruments (described below).
- Dispose of contaminated objects (gauze, cotton, and other waste items) in a properly marked leak-proof container with a tight-fitting lid or in a plastic bag.
- If disposable gloves were used, carefully remove gloves by inverting and place in the waste container.
- If reusable gloves were used, immerse both gloved hands briefly in the chlorine solution to decontaminate the outside, and then remove the gloves by inverting.
- Clean instruments and gloves after they have soaked in the chlorine solution for 10 minutes (as described above). Wash instruments with a brush, using water and either liquid soap or detergent. Avoid bar soap or powdered soap, which can stay on the equipment. Rinse and dry the equipment. While cleaning, wear utility gloves and an apron.
- Sterilize instruments and gloves in a high-pressure steam autoclave or a dry-heat oven or with chemicals. If sterilization is not possible or practical, high-level disinfect them by boiling, by steaming, or with chemicals.
- Decontaminate all surfaces that could have been contaminated by blood, such as the procedure table or instrument stand, by wiping them down with 0.5% chlorine solution.
- Wash hands with soap and water and dry with clean towel or air-dry.

Sources: McIntosh 1993 (8), Organon 1999 (9), Organon 2005 (10), EngenderHealth 2001 (4), World Health Organization 2004 (16), and World Health Organization and Johns Hopkins Bloomberg School of Public Health 2007 (17)