Key Inspection Areas for Common Gynecologic Instruments

Gynecological (GYN) procedures are one of the most frequently scheduled surgeries. These procedures are performed in the Operating Room, outpatient surgery centers and physician offices. GYN instruments come in various coatings, depending on the surgical procedure. Loop Electrosurgical Excision Procedure (LEEP), laser and standard (stainless) instruments are commonly used.

There are several points and inspection areas to be aware of when it comes to GYN instruments.

Speculums: The two basic speculums used are the Graves and the Pederson speculums. The Graves speculum is wider than the Pederson pattern (See Photo A). The width is the first determining factor, with the second factor being the blade length. Standard blade lengths are 3”, 4” and 4 ¼”; extra small (XS) and extra, extra long (XXL) speculums are also available.

Laser-Coated Speculums: (Photo B) These speculums are predominantly black in color and are very susceptible to chipping on their edges due to metal-to-metal contact with other instruments and metal instrument trays. The non-reflective, black finish/coating, often referred to as ebonized, is used so the laser does not reflect onto healthy tissue. This coating must be inspected for chipping and flaking. If this defect is identified, it is recommended that the instrument be sent out for repair/recoating.
LEEP Speculums: (Photo C) These speculums come in various sizes and various colors, such as blue, rose and, occasionally, black. LEEP coating is also susceptible to chipping and cracking due to metal-to-metal contact from other instruments and metal instrument trays. If the coating is identified with chips or bubbling, the speculum should be sent out for repair/recoating. The LEEP coating is non-conductive to contain the electrical energy.

Stainless: (Photo D) Although stainless GYN instruments are not coated, they do require careful inspection. The blades of the Graves speculum must be inspected for burrs, as well as blood and tissue. Some Auvard (weighted) speculums are chrome plated and this plating may begin to flake, resulting in patient safety issues. If flaking on the chrome plating occurs, the instrument must be replaced. The most popular cervical punch is the Tischler biopsy forcep, which is also manufactured using stainless steel (Photo E). This instrument must be inspected each time it is reprocessed. The jaw must be free of cracks, burrs and dents. To test the sharpness, the Tischler should punch cleanly through one thickness of tissue paper or facial tissue. If the instrument snags or tears, it must be sent out for sharpening.

Sterling Silver: Sterling silver is typically used to manufacturer GYN instruments that need to be malleable, such as the Sims uterine sound (Photo F). The silver plating will eventually tarnish. When this happens, the finish will appear dark and the instrument must be replaced.

Q: What is your position regarding use of stainless steel instrument cleaning brushes? Many instrument manufacturers advise against them, but our experienced repair technician is quite comfortable using them and we have never seen any damage from their use. Do you have knowledge or experience with any instrument damage from their use?

A: I completely agree with your experienced repair technician. If baked-on blood and tissue still remains on an instrument after using a nylon brush, the only way to remove it...
is with a stainless steel bristle brush. Stainless bristles bend before they scratch. It is important to know which instruments should NOT be brushed with a stainless steel bristle brush. These include:
1. Laparoscopic insulated instruments
2. LEEP/laser-coated instruments
3. Eye instruments
4. Coated instruments
5. Stainless speculums
6. Bipolar forceps
7. Flexible endoscopes
8. Rigid endoscopes

Note: Stainless steel bristle brushes should never be used to remove tape.

Acceptable applications for using a stainless steel bristle brush include:
1. Hemostatic serrations
2. Jaws of needle holders
3. Screw hinges and box locks
4. Teeth of files and rasps

For questions or comments, please contact Rick Schultz, the Instrument Whisperer™, at rick@instrumentwhisperer.com.

RICK SCHULTZ, the Instrument Whisperer™, is an author, inventor and lecturer, and the retired Chief Executive Officer of Spectrum Surgical Instruments Corp. He served as contributing editor of IAHCSMM’s Central Service Technical Manual (Fifth, Sixth and Seventh Editions) and authored the textbook, Inspecting Surgical Instruments: An Illustrated Guide. Schultz was named IAHCSMM’s Educator of the Year in 2002, and in 2006, was named American Hospital Association Educator of the Year. In 2007, he was named by Healthcare Purchasing News as one of the 30 Most Influential People in Healthcare Sterile Processing. Schultz currently serves as chairman of the IAHCSMM Corporate Advisory Committee and provides educational lectures to Central Service professionals at IAHCSMM Annual Conferences and other seminars across the country.