

Xpand: New multiuse iris expander surgical device

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The complex surgery code was originally created for situations where extra work, supplies, or techniques were necessary for cataract surgery. In our area, the complex surgery code 66982 allows for approximately \$150.00 more for the surgeon than the traditional cataract surgery code of 66984. It does not pay more to the ambulatory surgery center (ASC). Originally, it was thought that the 66982 complex surgery code would have very little use. However, with the advent of IFIS (intraoperative floppy iris syndrome), we find an increasing number of our cases are complex. Performing cataract surgery through a small pupil can be extremely difficult and requires additional surgical time. There have been a number of techniques used to address the small pupil. These included atropine drops preoperatively, intracameral epinephrine, and dispersive viscoelastics. However, none of these address the surgical complexities in patients with IFIS. Mechanical devices address both issues: small pupil and floppy iris. Iris retractors have been a mainstay in expanding the pupil and have improved over the years but still require 4 additional paracentesis sites, which can be cumbersome to place, add to surgical time, and can leave the pupil irregular. In spite of these disadvantages, we find that the newer flexible iris retractors have become much easier to use and are very cost effective for our ASC. Malyugin rings have been a great leap forward in offering easier placement and removal. When

used properly, the Malyugin rings generally leave the pupil with less damage than iris retractors. The problem has been the expense associated with a single-use device, which is not reimbursed to the ASC. In our ASC, we had elected to use reusable flexible iris retractors for most of our complex surgeries. This allowed us to reduce our cost per case for iris expansion to approximately \$15.00. However, for the last 6 months, we have been able to use the Xpand, a newly released iris speculum device by Diamatrix (The Woodlands, Texas). It functions similar to the Malyugin ring in terms of required incision size, placement on the iris, and expanded pupil size. The Xpand has one size, 6.7 mm, and is a titanium alloy device that is approved for multiple uses and resterilization up to 20 times. It makes our cost per case approximately \$45. This is more than our iris retractors but about one-third the cost of the Malyugin ring. Our experience is that it is not only less expensive and easy to use but that it gives excellent centration and visualization of the lens. The design and low profile make it extremely stable, allowing instruments to pass in and out of the eye without engaging the device. It can be inserted either with forceps (1.8 mm incision) or a special inserter (2.4 mm incision); both techniques are easily learned. A manipulator is used to facilitate placement of the 4 feet that cradle and expand the iris, helping to reduce damage to the pupil margin. In removing the device, the same manipulator is used to disengage the 4 feet prior to removal. This prevents excessive chaffing of the iris. The Xpand can then be easily removed with either the manipulator or the insertion device. The Xpand directions for use requires the same cleaning and sterilization as any other surgical instrument. A downside we have seen is that the Xpand is small and can be lost without careful technique by the surgical assist and instrument technicians. So who needs the Xpand? Any physician-owned ASC or corporate ASC looking to maintain a high level of care and cost efficiency.