

A New Approach to Ultrasonic Biomicroscopy; The ClearScan Methodology and Billing Questions

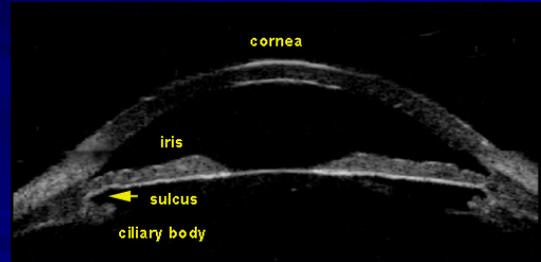
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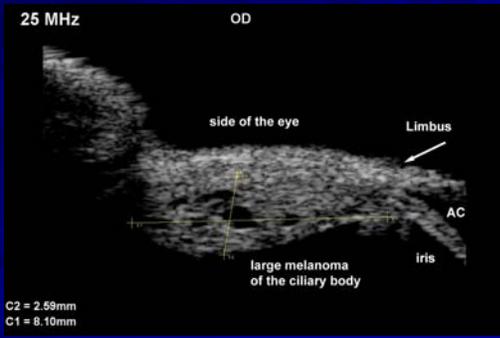
Consultant ESI and Quantel Medical



Ultrasound Biomicroscopy (UBM) of the eye



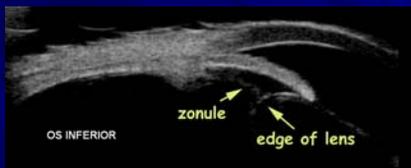
Ultrasound Biomicroscopy (UBM) and side of the eye



CB detachment extending 10 mm from iris

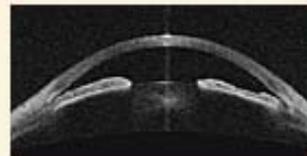


Visualizing zonules



Visante™ OCT Anterior Segment Imaging and Biometry

- Not a topic of discussion today



Problems with traditional Shell & Gel examination method

- Worry about probe tip hitting the cornea
- Probe sterility issues
- Methodology concerns
 - Patient must recline
 - Gel often required
 - Shell must be inserted under the lids and (uncomfortable)
 - Likelihood of corneal abrasions from shell as posterior structures are examined



Why must a shell be used in the first place?

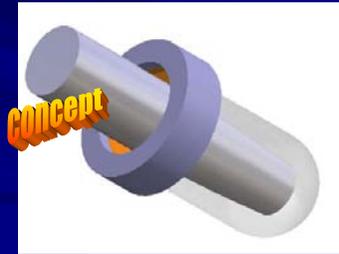


Near Field Artifact Requires Standoff

- By physically moving the ultrasound probe tip back and forth via a motor, a sector of 120 degrees can be examined
- The moving ultrasound probe/nub causes ultrasound waves to collide with one another creating interference which results in an acoustic dead zone
- Structures contained within this dead zone can not be visualized and this is termed "near field artifact"



The ClearScan cover replaces the gel & shell technique



Safety

- Cover material becomes a balloon once probe inserted
- Creating positive pressure and resistance so nub stays away from the cornea



Sterility

- ClearScan[®] patented is a disposable product
- Sterile bag/balloon surrounds probe



Sterility

- Study* of patient-to-patient transfer of micro-organisms on the ClearScan after a single use in 34 patients
- 80% of samples grew "bugs" associated with endophthalmitis, keratitis

* Bell NP, Anand A, Wanger A, Prager TC: Microbial Contamination of Ultrasound Biomicroscopy Probes: An Evaluation of Cross-infection Risk. J Cataract Refract Surg. 2012 Jan;38(1):174-5. Epub 2011 Nov 10.



Comfort & Measurement Accuracy ClearScan Versus Shell

Bell NP, Feldman RM, et al.: A New Technology for Examining the Anterior Segment by Ultrasonic Biomicroscopy. The Journal of Cataract & Refractive Surgery, Jan;34(1):121-5, 2008.



Methodology

- Fill bag to bottom of collar with **distilled water**
- Add water slowly to minimize air bubbles

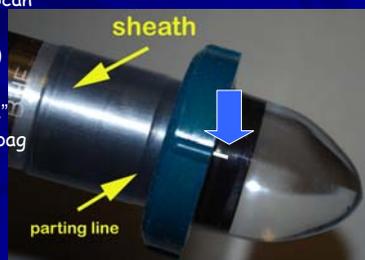


Methodology - Probe Insertion



Insertion

- Insert Probe
 - So barely protrudes under the ClearScan collar (no more than 1/4")
 - Probe tip about 1" from bottom of bag



Methodology add drop of anesthesia then BSS



Methodology

- Open eye c
 - Both hands
- Time-to-learn
 - About 20 minutes

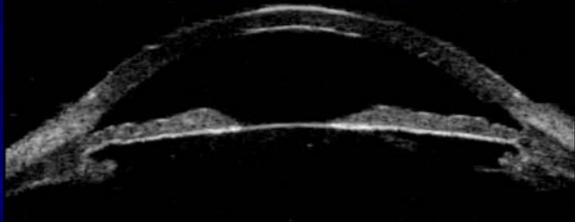


Methodology (Preferred-sitting)

Patient can be examined sitting (ocular structures & dynamics same as when viewed with slit lamp)



Note smooth corneal surface
CS drapes evenly over the cornea indicating minimal pressure

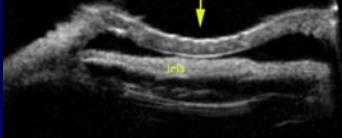


What if eye slightly soft?

ClearScan not covering cornea completely
Internal bag pressure may be too high



cornea dented by ClearScan in an eye with very low pressure



low IOP causes ClearScan to "dent" the cornea



Soft eye (> 3 mm hg) can be examined by modifying internal bag pressure

3 ways to reduce internal bag pressure....

1) decrease water fill



3 ways to reduce internal bag pressure....
2) adjust position of the probe

- probe slid forward increases pressure
- probe slid backwards decreases pressure
- Presence of small air bubble OK
- Preserve conical - bullet shape



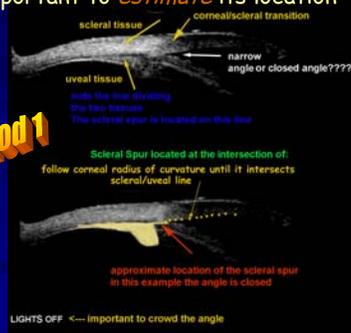
10 MHz B-Scan

3 ways to reduce internal bag pressure....
3) Lower bag pressure by pinching



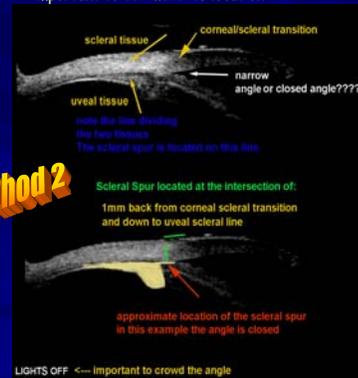
Scleral Spur - gateway to AC -
often not visible
important to *estimate* its location -

method 1



Scleral Spur in AC - often not visible
important to *estimate* its location -

method 2



Online resources - YouTube.com
search: ClearScan cover

- B-Scan and ClearScan
- Intro to UBM
- Angle Exam
- Probe Orientation
- Probe Fill Technique
- ClearScan tips
- Prager Shell Demo



Billing and Collections

- The UBM reimburses for each eye
- Depending on locale, one can expect to receive nominally \$85 per eye
- Code 76513 is an **open code** that should be used for UBM
 - in our experience, there have been few problems receiving insurance reimbursement

■ **Q. Can an office visit and a UBM exam be billed at the same visit?**

■ **A. Both the office visit and UBM will be paid even if performed on the same day as long as there is medical necessity for each service**

■ **Q. How does the global period of a surgical procedure effect payment?**

■ **A. The payment for any diagnostic test during the global period is once again dependent on the insurer's determination of whether or not there is medical necessity for the test. For Medicare, this often is regulated in the Local Coverage Determination.**

■ **For example, after cataract surgery and within the global period, a patient reports eye pain. To determine the cause of the problem (e.g., this may be due to the haptic touching the ciliary body or iris), a UBM is performed.**

- **The diagnostic test will be paid. However, the office visit will be denied during the global period since 20 percent of the global fee for the surgery is dedicated to postoperative management that includes the office visit.**

■ **Q. Does there have to be a clinical diagnosis or can a UBM exam be performed as part of a screening exam routinely?**

■ **A. If the diagnosis is not covered for payment for CPT code 76513 by the insurer, then it will not be paid.**

- **Screening examinations are not covered by Medicare with the exception of glaucoma screening**

■ **Q. If bilateral procedures are performed, can you bill for two procedures on the same day? Can other diagnostic tests performed on the same day be paid?**

■ **A. If there is medical necessity, not just that you want a comparison, Medicare pays at 100 percent of the allowable for each eye using code 76513. Other diagnostic tests performed on the same visit may be paid if deemed medically necessary and are not bundled.**

■ **Q. Is there a supply code (or "V" code) to cover the costs of the disposables?**

■ **A. Supplies and disposables are included into the 76513 CPT code as part of the practice expense and are not reimbursed separately. Neither Medicare nor private carriers pay any portion of the supply costs.**

Conclusion

■ **The UBM with bag/balloon technology is a hammer looking for a nail**

■ **because of the many clinical questions that can be answered**

- **efficaciously, quickly, safely and comfortably with relatively inexpensive equipment**