Rings and things:
Complicated cataract cases discussed at recent meeting

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Dr. Barrett speaks at the SNEC 25th Anniversary International Meeting. Source: ASCRS

The first of the Cataract Day sessions at the recent Singapore National Eye Centre (SNEC) 25th Anniversary International Meeting featured presentations and lively discussion from the faculty on “Rings and Things—Intraocular Devices for Complicated Cataracts.”

Mohan Rajan, MD, India, led with brief discussions of many of these devices as they come into play in the management of hard brown cataracts, but began by introducing a “super combo chopper” with a very sharp tip designed particularly for these “hard pieces of granite” that are commonly found in the eyes of patients in his country. The ease with which the chopper opens up the posterior capsular plate is simply “amazing,” Dr. Rajan said.

Another complication commonly seen in India along with hard brown cataracts is small pupils, and for these cases Dr. Rajan discussed the use of pupil stretch, iris hooks, the Malyugin ring, and the Bhattacharjee ring. Pupil stretch is useful if you do not have any of the latter devices, but Dr. Rajan cautioned that stretching should not be done at the axis of the incision. Meanwhile, when using iris hooks, Dr. Rajan said that surgeons should ensure placement of their stab incisions at the limbus and not the cornea. Placing the incisions at the cornea causes a slight haze
in the corneal tissue around the incisions. Unlike either of these approaches, the Malyugin and Bhattacharjee rings expand rather than stretch—that is, they enlarge the pupil without damaging the pupillary sphincter or otherwise disrupting the pupil’s anatomical structure. Going deeper into the eye, the session’s faculty also discussed the use of “rings and things” in the context of IOL subluxation, zonular weakness, and iris defects, congenital and traumatic.

In describing the use of capsular tension rings in subluxated cataracts, Samuel Masket, MD, U.S., quoted Ken Rosenthal, MD’s famous dictum to use CTRs “as late as you can, but as early as you must.”

In a lively discussion with fellow panelists Graham Barrett, MD, Australia, and Chee Soon Phaik, MD, Singapore, Dr. Masket advised against using iris hooks to support the capsule, as they are not designed to support the architecture of the capsule the way capsular hooks are—unlike iris hooks, capsular hooks have a longer reach and polished tips that lend support to the capsule's equator without the risk of puncturing or tearing the capsule.

Drs. Barrett and Chee, however, said they prefer iris hooks, although they admit that surgeons should be aware that the hooks do not support the whole capsule and they will need to compensate with some viscoelastic.

At the Medical Retina symposium that ran the same day, Paul Mitchell, MD, Australia, delivered the Lions Singapore Lecture, presenting and comparing the results of epidemiological studies from the Blue Mountain Eye Study (BMES) to the Singapore Malay Eye Study (SiMES).

One of the surprising findings these landmark epidemiological studies agreed on was that visual impairment, in addition to reducing quality of life, was associated with increased mortality—“not that they didn’t see the bus coming and were bowled over, but all-cause mortality,” he said. This, even after adjusting for all the confounding
factors Dr. Mitchell and his colleagues could think of. The reasons for the correlation are unknown, but the relationship was such that reducing visual impairment increased survival. In fact, following cataract surgery that eliminated visual impairment, mortality was reduced by 46%. This reduction was not seen when visual impairment remained after cataract surgery.