Are On-site Anterior Chamber Lens banks necessary in modern phacoemulsification surgery?

Background:

- Use of AC lenses has reduced as the complication rates for cataract surgery have reduced over recent years.
- Most capsule complications can be managed with sulcus lens placement at the time of primary surgery.
- We reviewed AC lens usage to ascertain whether maintaining an on-site lens bank was necessary

Aims:

- To audit insertion of AC Lenses at Musgrove Park, Taunton over the Last 3 years
- How many AC lenses were not –pre-planned and inserted at the time of primary cataract surgery?
- Whether an AC Lens bank is a necessary expense.

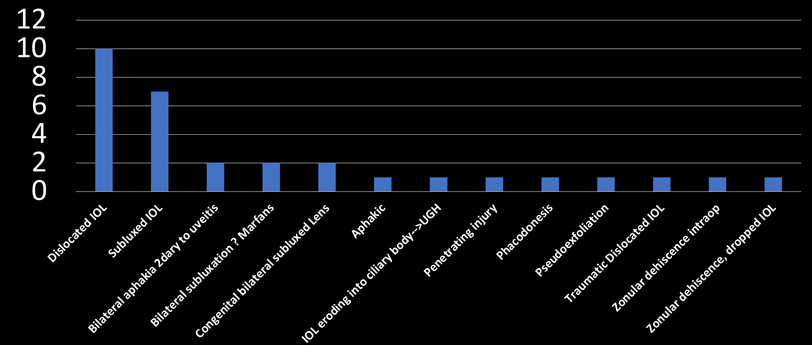
Methods:

- Theatre log books examined for AC lens insertion:
- Patient notes examined for demographics, operation details and reasons for AC lens insertion
- Patients grouped into three categories:
  - Group 1 - Lens inserted in one planned operation
  - Group 2 – Secondary lens implantation due to complications at primary surgery.
  - Group 3 - Lens inserted in one operation at time of complication (not pre-planned)

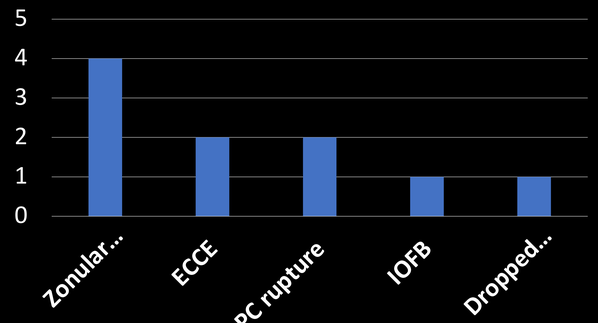
Demographics:

- Average Age 72.7 years (30-91)
- 22 Left eyes, 21 Right eyes
- 41 Patients (22 Males, 19 Females)
  - 3 Patients had bilateral AC lens insertions (Congenital lens subluxation, Marfans-related subluxation and aphakia secondary to uveitis.)

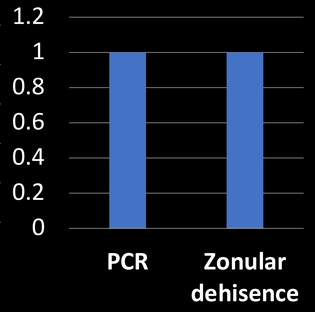
One Planned Operation



Secondary Lens implantation due to complications at primary surgery



Unplanned insertion



Results:

- Group 1 - 31 Lenses inserted in one operation (planned) 72%
- Group 2 - 10 inserted in two operations (planned) 23%
  - All complications at time of surgery:
    - 4 zonular dehiscence
    - 2 PCR, 2 converted to ECCE,
    - one IOFB removal
    - one dropped nucleus removed at first procedure by VR surgeon
- Group 3-2 lenses at primary surgery (unplanned): 4.7% i.e. not pre-planned but due to complications:
  - 1 hard nucleus converted to ECCE
  - 1 PC Rupture

Take Home Messages:

- Only 5% of AC IOLs were not pre-planned (0.026% of approx 7,500 total phacos in the study period)
- Not maintaining an AC lens bank may be more cost effective
- Electronic patient records will allow for more rapid future reaudit

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