Despite this shift to quicker, less-invasive techniques, rates of outpatient surgery continue to vary widely from centre to centre. They ranged from 16 centres reporting 100 per cent outpatient procedures to four centres reporting 100 per cent inpatient. However, the mean value of 23.5 per cent maintains a decreasing trend in inpatient procedures.

Dr Lundström noted that use of outpatient settings might be related to the structure of national health systems. “You tend to do what you get reimbursed for,” he told the symposium.

However, local conditions, such as the distance patients must travel for surgery and the availability of local follow-up care also encourage the continued use of inpatient surgery in many areas, he said.

Complicated eyes produce complicated outcomes

Overall, cumulative sight-threatening complications showed a slight uptick to 3.2 per cent in 2005 from the record low 2.3 per cent recorded in 2004, but maintained a long-term downward trend after hovering in the 3.5 per cent to 4.4 per cent range from 1998 to 2003. Posterior capsule rupture rates reached a new low of 1.2 per cent, down from rates above two per cent for most of 1998 to 2003. The vitreous loss rate was 0.8 per cent, up slightly from 0.4 per cent in 1998 to 2003, but also well below the historical range of one per cent to 1.6 per cent seen from 1998 to 2003.

But overall rates don’t tell the whole story. The 2005 ECOS survey collected information on factors that might complicate surgery. The following condition rates were reported:

- White cataracts: 3.1 per cent
- Small pupils: 2.9 per cent
- Pseudexfoliation: 5.7 per cent
- Corneal opacities: 2.2 per cent
- Previous refractive surgeries: 0.25 per cent

Not surprisingly, surgical complications were higher in these more-difficult eyes. Unplanned extracapsular cataract extractions were more than 10 times as frequent with white cataracts (1.57 per cent) than with small pupils (0.84 per cent) as for all eyes (0.15 per cent). Similarly, anterior chamber lenses were used 11 times more frequent among eyes with small pupils (1.68 per cent) and five times more frequent as for all eyes (0.11 per cent).

Difficult eyes were also 10 to 15 times more likely to leave surgery without an IOL, with 2.4 per cent of white cataract eyes and 3.4 per cent small pupil eyes left without lenses.

“If we look at the entire database we find that about one in 200 ends up with unexpected aphakia. With white cataracts or small pupils it’s one in 40 or even one in 30. This is valuable information to share with the patient in discussing likely outcomes, one way or the other.”

Dr Lundström noted that wide variations in complication rates were reported:

- 0.15 per cent for previous refractive surgeries
- 0.72 D stable for second-eye surgery
- 1.5 D rising for induced astigmatism
- 0.25 per cent for corneal opacities
- 1.6 per cent for previous refractive surgeries
- 0.84 per cent for small pupils
- 1.57 per cent for white cataracts
- 0.09 per cent for anterior chamber lenses

Overall, cumulative sight-threatening complications showed a slight uptick to 3.2 per cent in 2005 from the record low 2.3 per cent recorded in 2004, but maintained a long-term downward trend after hovering in the 3.5 per cent to 4.4 per cent range from 1998 to 2003. Postoperative complications were also higher, at 8.5 per cent for white cataracts and 7.5 per cent for small pupil eyes, compared with 3.5 per cent for all eyes.

On the other hand, visual outcomes were not hugely worse for difficult eyes, with 82.9 per cent of white cataract eyes and 87.5 per cent of small pupil eyes achieving a best-corrected vision of 0.5 or better, compared with 90.2 per cent overall. Dr Lundström again emphasised the value of this outcome information in delivering informed consent.

Converting to web-based survey affects participation

In the 2005 ECOS survey, 38 centres in 20 countries reported on 4,039 procedures, down from a peak of 45 centres in 21 counties reporting on 5,451 procedures in 2003. Of the 10 years ECOS has collected data (no survey was done in 1996), 88 centres in 27 countries have participated, including 12 in the UK, 11 each in Denmark and Holland, nine in Norway, six in Sweden, five in the Czech Republic, four in Italy and three each in France and Ireland.

Nonetheless, demographically, the 2005 sample was similar to previous years with 62.2 per cent female and a mean age of 73.4 years. Second-eye surgeries continued a slow upward trend, reaching 44.1 per cent, up from 38.1 per cent in 2000 and 26.1 per cent in 1995.

Dr Lundström attributes the participation decline to a switch from paper-based ECOS survey now uses the same electronic medical records system to deliver the annual surveys to date.

The web-based format also allows surgeons to compare data instantly with all other participants, or any subgroup. “This makes the study a more powerful tool,” Dr Lundström said.

For more information please visit the ECOS website at www.eurocat.net mats.lundstrom@ltblekinge.se