

Sequential or delayed cataract surgery

PATIENTS derive a higher benefit from getting both eyes operated sequentially, than from having second eye surgery weeks later, a Swedish study suggests.

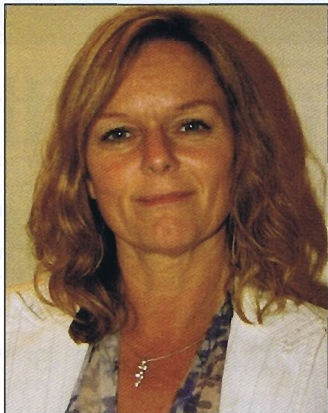
The study compared the cost effectiveness and patient benefit of immediate sequential cataract surgery to delayed sequential cataract surgery in a group of 97 patients who underwent bilateral cataract surgery at Blekinge Hospital, Karlskrona, Sweden.

"For selected cases, immediate sequential cataract surgery was described as favourable for patients and more cost effective for the clinic. This is, however, for exclusive patients who have no other health problems, so we need to examine the candidates very thoroughly. Four and a half per cent of Swedish bilateral cataract surgery is performed on the same day," reported Susanne Albrecht RN.

Mrs Albrecht and her colleagues gathered data from three sources. The first was a study cohort of 97 patients undergoing bilateral surgery at the time of the investigation. Seventeen of the patients had immediate sequential cataract surgery and 80 had delayed sequential cataract surgery.

The second source was published hospital data regarding surgical costs. Finally, Mrs Albrecht used published hospital data on the patients' capability index to determine the 'value for the patient' of immediate sequential cataract surgery and delayed sequential cataract surgery.

The data revealed that immediate surgery patients underwent one preoperative visit and one surgical visit. They required 114 minutes of surgical care on the day of surgery on average and required 15 minutes of administration/booking time. They underwent two surgeries with two disposable units, received two IOL implants, and had two post-surgical visits. These surgeries were done



Susanne Albrecht

several years ago, and post-surgical visits are fewer today, Mrs Albrecht noted.

The delayed sequential cataract surgery patients underwent an average of one preoperative examination and two surgical visits. They required 144 minutes of surgical care (72 + 72 min) on the day of surgery and required 30 minutes of administration/booking time. They

underwent two surgeries with two disposable units, received two IOL implants, and had four post-surgical visits. They needed 15 minutes of extra administration time, she said.

Surgery on both eyes was 1.14 times more expensive with delayed sequential cataract surgery than immediate sequential cataract surgery, with respect to all surgical costs. Furthermore, delayed surgery was 1.77 times more expensive than immediate surgery with regard to personal costs. Expensive materials like the IOL and viscoelastic disappear in the overall costs, but show up in the personal expenses, she noted.

The 'value to the patient' of undergoing immediate sequential cataract surgery depended on the time between the first and second eye surgeries. The 'value to the patient' of undergoing delayed sequential cataract surgery, by contrast, depended on the remaining lifetime after bilateral surgery.

A long waiting time for second eye surgery and a short remaining lifetime decreased the patient value of delayed sequential cataract surgery compared to immediate sequential cataract surgery. Certain patients would gain more from immediate surgery on both eyes, because their remaining lifetime is so short,

Mrs Albrecht said.

Visual function prior to second eye surgery in the immediate surgery group was 1.0 compared to 0.8 in the delayed surgery group. Disability scores from the questionnaire, comparing immediate and delayed sequential cataract surgery, revealed less total disability in the immediate surgery group. Immediate sequential cataract surgery had overall better subjective patient scores, she observed.

Overall, visual function before second eye surgery in delayed sequential cataract surgery patients showed decreased visual acuity, a higher disability score, and lower visual satisfaction until the patient has had second eye surgery, she observed.

The capability index is a term that reflects a patient's ability to perform activities and combinations of activities if given access to healthcare services and in light of socio-demographic factors (such as age, sex, income, and disabilities). Capability refers to the patient's improvement in daily activities after cataract surgery. Capability was used in these terms, because health, defined as a physical and mental condition of the body, may decrease over time, but capability will not, Mrs Albrecht said. The Catquest questionnaire measured patient capabilities in daily life.

All of the patients taken as a whole had a capability index increase of 83 per cent. Immediate sequential cataract surgery patients had an increased capability index of 89 per cent after the second eye surgery. Delayed sequential cataract surgery patients had only a 31 per cent capability index after the first eye surgery and an increase to 79 per cent after second eye surgery. The delayed sequential cataract surgery capability index was not as high as the immediate sequential cataract surgery patients, even after second eye surgery, she noted.

The average period between first and second eye surgery for delayed sequential cataract surgery patients was 5.5 months. Eleven patients were excluded because of

unusually long waiting times, for personal issues regarding poor general health or other reasons. Had they been included, the average waiting time would have been 9.83 months between surgeries. Mrs Albrecht calculated that the lifetime expectancy of Swedish patients after cataract surgery was 11.5 years.

Infection risk is a primary concern raised by opponents of immediate sequential surgery. "We avoid the second operation if there are any intra-operative complications at all. Prior to surgery, however, patients undergo quite thorough examination before we select them for immediate bilateral cataract surgery. We treat the two surgeries like two separate procedures, thus the term sequential. After completing surgery on the first eye, we throw everything away, and replace them with totally new products, even the surgical garments," she maintained.

Mrs Albrecht explained that potential candidates for immediate sequential cataract surgery were given the choice to have immediate surgery or not. Although most patients want it, a few opt for delayed surgery. They usually like the idea of having just one procedure, she said.

Four and a half per cent of Swedish bilateral cataract surgery is performed as immediate sequential cataract surgery, she noted. It is reserved for patients who have no other medical problems. Immediate sequential cataract surgery patients did not have a higher rate of infections compared to delayed sequential cataract surgery patients, she said.

"Immediate sequential cataract surgery means cost-effective surgery and a faster improvement of the capability index compared to delayed sequential cataract surgery. All costs included, delayed sequential cataract surgery was 14 per cent more expensive than immediate sequential cataract surgery. The value of immediate sequential cataract surgery for the patients depends on the length of waiting period between surgeries and on the patient's survival time after surgery," she said.