



Surgery for degenerative scoliosis

Adults with scoliosis sometimes require surgery because of deterioration in late middle age that often causes mechanical pain as the spine becomes more unbalanced. If such patients have had previous corrective or stabilising surgery the problem is usually more difficult, because the existing fusion mass may need to be broken down by complex surgery on the front of the spine as well as the back in two or three separate operations 2-3 weeks apart. Such surgery is major, taking many hours.

Scoliosis surgery is a major operation in its own right, but modern techniques of anaesthesia and much improved procedures and instrumentation have greatly enhanced the effectiveness and reduced the unpleasantness of surgery. As an adult surgery is by no means out of the question and your specialist will be able to advise you on what is the best option. One factor that does have an affect on whether scoliosis surgery is possible is bone density. Scoliosis is far more common in women, and at the time of the menopause bone density begins to diminish. This reduction in bone density makes the operation far more risky, and accurately measuring bone density to assess the risk is vital.

The decision as to whether surgery should be advised is always taken on an individual basis after discussion between the scoliosis specialist and the patient. The advice that surgery should be considered can come as a considerable shock for the patient, which makes it difficult to think rationally at the time of the consultation with the specialist. Patients are strongly advised to take someone with them to the consultation so that they can act as a second pair of ears and provide additional support. Sometimes unanswered questions come to mind after the consultation. The best approach is to write down such questions so that at the next consultation the patient will remember to discuss these matters. Patients can also call or email SAUK so that we can help clarify things and attempt to answer forgotten questions.

Spinal fusion

Scoliosis surgery is complex and should be done only by surgeons specialising in the disorder who have appropriate training and infrastructure in their surgical units. Patients should ensure that they see or have been seeing such a specialist because being operated on by someone not so familiar with scoliosis surgery can have drastic consequences. Patients can find out who the scoliosis specialists are by calling or emailing the SAUK office. There are around 30 scoliosis centres across the UK and the Republic of Ireland that have scoliosis specialists, who are all members of the British Scoliosis Society. These specialists are all very conscious of the need to consider the patient as a whole and safety is their top priority. Surgery undertaken by these experts in scoliosis units is no longer a great ordeal for patients. Furthermore, modern methods of anaesthesia and pain control, and specialised nursing care, keep to a minimum pain and stress for the patient. Almost all patients find surgery a positive experience with a satisfactory outcome and return to everyday life.

During surgery the surgeon will monitor spinal cord function electronically, which is an important safety measure. Very occasionally he will use a so-called wake-up test when the patient is still anaesthetised and feeling no pain, but is just conscious enough to move their feet to confirm normal spinal cord function. Once again, safety is a top priority. Serious complications such as paralysis are very rare (less than 1%).

This description relates to posterior surgery (to the back of the spine). Sometimes it is more advantageous to operate on the front of the spine (anterior surgery), to obtain a better correction with a shorter spinal fusion, particularly for curvatures of the lumbar spine. In anterior surgery access to 1

the spine is obtained via one or more ribs. The rib when removed is used as bone graft between the vertebrae. A system of screws and rods is usually used to correct the curvature and a high degree of correction can often be obtained. Nowadays anterior surgery is almost always safe and straightforward and the surgeon will discuss the details with the patient. The postoperative routine is much the same as for posterior surgery.

For both types of surgery it is essential that patients should have as full an understanding as possible of what is involved, both before and after surgery. If everyone is working together, anxiety and stress are greatly reduced. Obviously, no major operation is without worry, and inevitably occasional complications arise, but a good understanding of what is involved helps all parties to work together for the best possible outcome. The patient is usually in hospital for 7-14 days.

Aftercare

Patients need to understand the principles of aftercare at home, which usually consists of gentle and gradual mobilisation, with the patient feeling more or less normal after about 6 weeks. Because this is a very big operation, patients will feel extremely tired, and will need to build up their stamina slowly. On return home patients will need someone to help them cook, clean, bath, shop and carry out other everyday activities because initially these tasks will be difficult. Older and frailer people may need fairly constant care and attention for 6-8 weeks. The patient can usually return to work and light exercise 3 months after surgery, but more strenuous exercise such as cycling, horse riding and tennis should be resumed only after consulting the specialist. Outpatient follow-up appointments will usually take place 2-3 months after surgery and then again after a year, with check X-rays as necessary.

Patients should remember that there is no set timetable for recovery. Surgery affects different people in different ways, so one person's experience may not be the same as another's. Recovery is a lengthy business: on average, it takes 9 months to a year for the fusion to heal, and 12-18 months for the patient to recover fully.