Difficulty Swallowing After Neck Surgery

It makes sense that patients having anterior cervical spine surgery (from the front of the neck) might experience difficulty swallowing for a few weeks after the procedure. This symptom of painful swallowing is called dysphagia. But how come some patients develop this transient (temporary) symptom and others don’t? And how often does it happen?

These are the questions posed in this study by surgeons from the University of Pittsburgh. They compared a small number of patients who had an anterior cervical discectomy and fusion (ACDF) with a similar-sized group of patients who had a lumbar spine (low back) fusion.

ACDF refers to the surgical removal of a damaged disc from between two vertebrae with fusion of those two vertebrae to each other using bone grafts, titanium cages, or other similar fixation devices. The word anterior in the name tells us the surgeon made the incision and performed the procedure from the front of the spine.

The lumbar procedure was done from the back or posterior aspect of the spine. For some patients it was just a matter of removing the damaged disc while others had a disc removal and fusion. They used lumbar spine patients as the comparison group to see if the swallowing difficulty is a leftover effect of intubation (breathing tube placed down the throat during anesthesia).

Post-operative dysphagia seems to be a fairly common problem. As many as 60 per cent of all patients having the anterior cervical discectomy and fusion (ACDF) procedure report this as an annoying and sometimes disabling symptom. Although the dysphagia usually goes away in the first three weeks after ACDF, there are cases of chronic (permanent) dysphagia.

A special questionnaire called the Swallowing-Quality of Life Questionnaire (SWAL-QOL) was used to measure dysphagia. This survey helps determine the type of symptoms, frequency of symptoms, and effect of dysphagia on the patient's life.

Patients ranked the presence of symptoms such as coughing, choking when eating, gagging, drooling, and problems chewing from never present to almost always present. Other symptoms on the survey include food sticking in the throat or mouth, food or liquid dribbling out of the mouth, and having excess saliva or phlegm in the throat.

They found that the anterior cervical discectomy and fusion group were much more likely to experience dysphagia after surgery than the lumbar surgical group. When all the data was analyzed, it wasn't the patient's age, length of surgery (intubation), history of diabetes or rheumatoid arthritis or even body size that put patients at risk of dysphagia. This symptom was more likely to develop in women and in patients who had a history of smoking and especially those who had a history of chronic obstructive pulmonary disease (COPD).

The authors concluded that post-operative dysphagia is related to the anterior cervical spine surgery and not the intubation process. Although they did not assess specific causes of the dysphagia, other researchers have commented on this problem. For example, it has been suggested that moving the esophagus to one side during the anterior neck surgery may be a factor in the development of dysphagia.

It's possible that bone spurs present even before the cervical spine surgical procedure is done may contribute to the problem after surgery. Other studies have pointed to older age as a possible risk factor for dysphagia.
after cervical discectomy and fusion but not all study results agree on this one. Vertebral fusion at more than one level may also be a risk factor for dysphagia.

In summary, it appears from this study that difficulty swallowing after spinal surgery is an effect associated with anterior cervical spine (neck) surgery much more often than with lumbar (low back) spine surgery. Although having a tube down the throat may aggravate the problem, it's not the primary (main) problem. At least for this group of patients, the effects didn't last past three months. Everyone was able to recover without permanent or disabling dysphagia.