

Spinal tumors

Tumors of the vertebral column and spinal canal can arise in bones or vertebral bodies and exert pressure on the spinal cord meninges. Furthermore, they can grow intradurally, i.e. within the spinal meninges; from this location they can then press on the spinal cord or nerves.

There are also tumors which arise intramedullary, i.e. in the spinal cord, and can result in paralysis. In general these tumors are difficult to treat surgically: however, surgical removal is possible under microsurgical conditions. During such procedures spinal cord function is monitored while the patient is under anesthesia via the somatosensory-evoked potentials (SEP) and motor-evoked potentials (MEP). Function (movement and sensitivity) may be somewhat poorer postoperatively. However, it usually improves after physiotherapy and treatment with medication.

Various procedures are available for creating a surgical access here. In addition to hemilaminectomy, i.e. removal of the lamina from one side of a vertebra, laminoplasty (performed over several segments if necessary) has proved to be effective. In this procedure the vertebral arch is separated and later reimplanted with miniplates. In adults titanium plates are used, in children plates of reabsorbable lactulose). The surgeon thus obtains an excellent overview and vertebral column function is preserved.

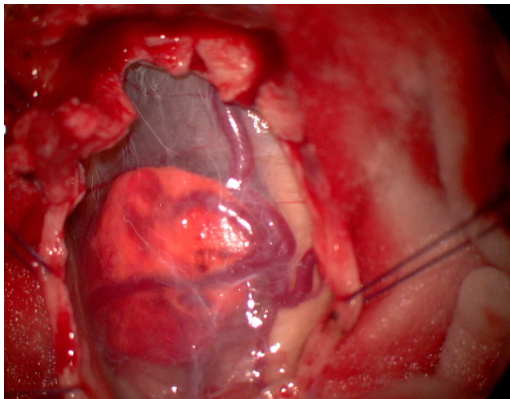


Fig.: Hemangioblastoma of the medulla oblongata.