

A Swedish study([i]) of peripheral neurologic deficits found that there might be a correlation with higher concentrations of lidocaine, but their database was incomplete and therefore no conclusive statement could be made. They noted bladder, bowel and sexual dysfunction and motor deficits as well as lumbar and limb pain.

Arachnoiditis Cases

Palot et al ([ii]) include arachnoiditis as a cause of prolonged neurological complications of obstetrical epidural analgesia, but concluded that long-term problems are rare.

Sghirlanzoni et al ([iii]) discuss six patients with arachnoiditis secondary to epidural anaesthesia (no other risk factors were involved). Of these, only two patients had also had transient distress immediately following the procedure, and all the procedures had apparently been performed in a standard manner without obvious complication at the time.

Vandermeulen ([iv]) includes arachnoiditis as a "mishap"... "solely due to ... epidural anaesthesia". Haisa et al ([v]) state that lumbar adhesive arachnoiditis should be considered for differential diagnosis of back and leg pain after epidural anaesthesia.

They discuss the case of a 30 year old patient who developed arachnoiditis after epidural intubation for anaesthesia during childbirth.

Furthermore, epidural anaesthesia may cause subarachnoid cysts or cavities, which are also recognised complications of arachnoiditis.

Torres et al([\[vi\]](#)) suggested that

“meningeal inflammation may have left scars which later induced ischemia and subsequent cavitation.”

Alternatively, CSF flow may have been impeded, thus dilating the central canal and causing compressive ischaemia, thence myelomalacia and cavitation. They discussed seven patients with spinal arachnoiditis secondary to epidural anaesthesia, all of whom had subarachnoid cysts and five had cord cavitation.

Sklar et al([\[vii\]](#)) noted subarachnoid cysts on MR scan, with irregularity of the surface of the cord, intramedullary cysts and myelomalacia, in patients following epidural anaesthesia.

However, in four cases, arachnoiditis was not suspected clinically.

Other authors([\[viii\]](#)) have also discussed arachnoid cysts secondary to epidural anesthesia.

[\[i\]](#) Pleym H, Spigset O *Acta Anaesthesiol Scand* 1997 Apr;41(4):453-60 Peripheral neurologic deficits in relation to subarachnoid or epidural administration of local anesthetics for surgery. A survey of 21 cases.

[\[ii\]](#) Palot M Visseaux H Botmans C, Pire JC *Cah Anesthesiol* 1994;42(2):229-33 [Epidemiology of complications of obstetrical analgesia]

[\[iii\]](#) Sghirlanzoni A, Marazzi R, Pareyson D, Olivieri A, Bracchi M *Anaesthesia* 1989

Apr;44(4):317-321 Epidural anaesthesia and spinal arachnoiditis.

[iv] Vandermeulen E, Gogarten W, Van Aken H *Anaesthetist* 1997 Sep;46 Suppl 3: S179-S186 [Risks and complications following peridural anesthesia]

[v] Haisa t, Todo T, Mitsui I, Kondo T *Neuro Med Chir(Tokyo)* 1995 Feb;35(2):107-9 Lumbar adhesive arachnoiditis following attempted epidural anesthesia?case report

[vi] Torres D, Bauso Toselli L, Vecchi E, Leiguarda R, Doctorovich D, Merello M, Guevara J, Nogues M *Medicina (B Aires)* 1993;53(5):391-396 [Spinal arachnoiditis as a complication of peridural anesthesia]

[vii] Sklar EM, Quencer RM, Green BA, Montalvo BM, Post MJ *Radiology* 1991 Nov;18(2):549-554 Complications of epidural anesthesia: MR appearances of abnormalities

[viii] Nogues MA, Merello M, Leiguarda R, Guevara J, Figari A *Eur Neurol* 1992;32(2):99-101 Subarachnoid and intramedullary cysts secondary to epidural anesthesia for gynecological surgery

Tseng SH, Lin SM *Clin Neurol Neurosurg* 1997 Dec; 99(4): 256-8 Surgical treatment of thoracic arachnoiditis with multiple subarachnoid cysts caused by epidural anesthesia.