A 30 year old Asian female, had a vaginal delivery of a baby girl which was complicated by shoulder dystocia and a post partum haemorrhage. Following initial fluid resuscitation, she remained haemodynamically stable. Laboratory haematology results showed; haemoglobin 9g/dL, platelets 157 x 10^9/L and International Normalised Ratio of 1. She was scheduled for a repair of a third degree tear.

In the sitting position, under aseptic conditions the L3/4 interspace was identified and the skin anaesthetised with 1% lidocaine. A 25 Gauge Sprotte needle was placed and revealed clear free flowing cerebrospinal fluid on first pass. 2 ml of 0.5% heavy bupivacaine was injected with no pain or paraesthesia and the patient positioned supine. A satisfactory block to ethyl chloride reached the T10 dermatome bilaterally. She was placed in the lithotomy position and total surgical time was 20 minutes. Immediately post-operatively, the patient reported bilateral calf pain which did not settle. Examination 12 hours later revealed an asymmetrical reduction in lower limb power, a patch of reduced sensation bilaterally and reduced anal tone. Her bowels had not opened and a urinary catheter remained in situ.

Urgent MRI and neurosurgical review was unremarkable. The following day, the patient continued to complain of burning sensation in her feet with weakness in her legs which was inconsistent on clinical examination. She was encouraged to mobilise and bowel and bladder function were normal. She was discharged three days post partum. At follow up three weeks later she was asymptomatic.

Suspected cauda equina syndrome after spinal anaesthetic has been reported, and can be secondary to haematoma or neurotoxicity of local anaesthetic(1-2). Most common symptoms are low back pain, unilateral or bilateral leg pain, saddle anaesthesia, bowel and bladder incontinence and sensori-motor deficit.

Transient neurological symptoms post neuroaxial blockade include symmetrical bilateral pain in back or pain radiating to lower extremities. It has been reported in patients receiving 10mg of hyperbaric bupivacaine however the duration of symptoms was less than 12 hours(3). Two thirds of neurological complications post neuroaxial blockade resolve spontaneously(4), however cauda equina should be ruled out with anyone presenting with abnormal neurology as urgent surgical decompression may be necessary.

References:
1. Jain et al. Cauda equina syndrome following an uneventful spinal anaesthesia. Indian j Anaesthesia(2010);54:68-69
3. Dijkstra et al., Spinal anaesthesia with articaine 0.5% vs bupivacaine 0.5% for day-case lower limb surgery: a double blind randomized clinical trial. BJA(2008)100(1):104-108