

Postoperative period was uneventful and the patient was discharged after 4 days.

**Conclusions** In patients with severe cardiovascular disease, titration of lower doses of LA in continuous subarachnoid block allows a safer procedure.

### #36461 BAMBOO SPINE AND NEURAXIAL BLOCKADE – AN ANESTHETIC CHALLENGE IN SEVERE ANKYLOSING SPONDYLITIS

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**Background and Aims** Ankylosing spondylitis (AS) is a chronic, progressive inflammatory disease that affects the spine and sacroiliac joints. Disease spectrum may range from mild rigidity to bone fusion of the spine. Inevitably, neuraxial blockade may be technically difficult or impossible to achieve due to closed interspinous spaces and loss of flexibility. Tracheal intubation may also be difficult because of the involvement of cervical spine and temporomandibular joint. Cardiopulmonary complications are frequently present, demanding a careful pre-operative evaluation.

**Methods** A 69-year-old woman with a long history of AS presented for hip replacement surgery. The patient had a bamboo spine with accentuated thoracolumbar kyphosis and no mobility of cervical spine, which was fixed in a flexed posture. After positioning in right lateral decubitus, spinal anesthesia was achieved after 3 attempts, at L3-L4 interspace, paramedian approach, with a 25G Quincke needle. 9 mg of isobaric bupivacaine 0,5% and 2 mcg of sufentanyl were administered. Ultrasound guided femoral nerve block and lateral femoral cutaneous nerve block were previously successfully performed.

**Results** The sensory and motor blocks were adequate, and the patient remained hemodynamically stable thorough surgery.



Abstract #36461 Figure 1 Positioning



Abstract #36461 Figure 2 Cervical spine fixed

**Conclusions** AS presents significant challenges to the anesthesiologist, thus requiring a careful anesthetic planning. Regarding regional anesthesia, the major concerns are the difficulty of the technique, increased risk of complications and the unpredictable sensory and motor spread of the neural blockade. If general anesthesia is necessary, awake fiber optic intubation should be considered, and cardiopulmonary pathology held in consideration.

### #33940 COMPARING FLOW RESISTANCE BETWEEN THE NRFIT AND LUER CONNECTORS FOR DIFFERENT SPINAL NEEDLES

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**Background and Aims** NRFit connectors are 20% smaller and 3mm longer than standard Luer connectors [1]. Does switching to NRFit connectors from Luer connectors of the same manufacturer increase the perceived resistance to flow during aspiration and injection when performing spinal block? This study compares the flow resistance to water between: (a) Pajunk® NRFit versus Pajunk® Luer of the Sprotte® 24G x 90mm spinal needles. (b) Vygon® NRFit versus Vygon® Luer of the Whitacre® 25G x 90mm spinal needles.

**Methods** Thirty ward nurses who had never used these needles volunteered to test these spinal needles in a simulated practice. Each needle was primed with water and then attached to a 5 ml syringe containing 3 ml water. Using the same hand, each nurse was asked to aspirate 1ml from a glass filled with 10 ml water and then inject 3 ml under the water in the same glass. Unlimited attempts were permitted until they could determine the needle with the lowest resistance or if they felt that there was no difference in resistance between the two needles from the same manufacturer.