

A Simple Technique to Secure Neutral Head Position for Shoulder Surgery in Beach Chair Position Under GA

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It is crucial to minimise the positional injuries during any surgical procedure [1]. Many of the surgical shoulder procedures are performed in the beach chair position [2]. Maintaining the head and neck in a neutral position is essential to limit spinal cord, brachial plexus and cranial nerve injuries [3-5]. There have been a limited number of reports of carotid artery injuries due to excess rotation, flexion, or extension of the neck [6]. The malposition of the neck could also impede venous outflow from the head, this impediment of venous outflow coupled with drop in blood pressure due to head up position can compromise cerebral blood flow [7,8]. It is therefore essential to secure the head and neck in a neutral position when the patient is placed in the beach chair position [9].

Various techniques have been used to maintain the head and neck in a neutral position [2]. For patients having shoulder surgery under general anaesthetic in our hospital we use a simple method to keep the head and neck in a neutral position to prevent positional injuries. After induction of anaesthesia and successful placement of ETT/LMA patient eyes are taped. A team-based approach is used to place the patient in the beach chair position.

The patient's head is placed in a special head section of the shoulder table as shown in Figure. The anaesthetist is responsible for taking care of the patient's head and airway during positioning. Step by step the table is adjusted to achieve the final beach chair position. Once the surgeons are satisfied with the position of the patient an elastic dressing (Eesbian Stocking Bandage®) in the shape of a Balaclava (Figure) is placed over the patient's head and face. Two slits are made in the Balaclava, one to connect the airway device and the other to relieve pressure on the nose as shown in the figure. This keeps the patient's head in a secured neutral position and helps to avoid any positional injuries during the surgery. This simple method is shown to be inexpensive, reproducible, reliable and easy to perform.



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