CONTACT RADIATOR BURN SUBSEQUENT TO SPINAL ANAESTHESIA

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SUMMARY. An unusual case is reported in which a patient sustained a third-degree burn of the plantar surface of the right foot as the result of contact with a heating radiator. This occurred when the patient fell asleep in his hospital bed after knee surgery. Spinal anaesthesia is easy to perform, and the risk factors, though present, are not serious. Such accidents are not infrequent and care should be taken to prevent them.

Keywords: burn, spinal anaesthesia, radiator

Introduction

Spinal anaesthesia (SA) is a form of regional anaesthesia involving the injection of a local anaesthetic into the subarachnoid space, generally through a fine needle. SA sometimes causes complications. To our knowledge, no contact burn due to SA has ever been reported in the literature.

We report the case of a 21-year-old man who suffered a third-degree burn on the plantar surface of his right foot as the result of contact with a heating radiator after SA for knee surgery (Fig. 1). After SA, the patient was immediately transferred to a room, where he fell asleep, his right foot coming into contact with a hot radiator - it is not clear for how long. The burned area was dressed every day and treated conservatively for four weeks without any surgery.

SA is easy to perform and has the potential to provide excellent operating conditions. If the anaesthetist has adequate knowledge of the relevant anatomy, physiology, and pharmacology, safe and satisfactory anaesthesia may easily be obtained to the mutual satisfaction of the patient, surgeon, and anaesthetist. However, although SA offers many advantages, it is not risk-free. Post-SA side effects vary, but usually they are not too serious.

In Turkey, central heating radiators are a common domestic heating system in homes, hospitals, workplaces, and elsewhere. The radiator surface temperature of is kept at 60-70 °C, according to the Turkish Standards Institute. One second of exposure to 70 °C may cause localized, deep, and even life-threatening burns: burn injury is a major potential risk for patients with sensory deficits and physical disabilities.

These burns are therefore preventable and some basic measures could reduce the incidence of accidental burn injury due to SA. The following quick and cheap preventive measures should be taken into consideration:

1. Nurses in the recovery room should be sure that the numb area is protected from pressure and injury until sensation returns.

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2. Beds should be kept at a safe distance from radiators to avoid contact thermal injury.
3. Shelving or protective grilles should be used to cover the radiator surface.
4. The central heating system should have a safety mechanism to detect and shut down a radiator that is overheating.

We hope that this clinical report will succeed in raising awareness of the dangers involved in spinal anaesthesia.

RÉSUMÉ. Les Auteurs décrivent le cas peu commun d’un patient atteint de brûlures de troisième degré dans la surface plantaire du pied droit causées par contact avec un radiateur de chauffage quand le patient s’est endormi dans son lit d’hôpital après une opération chirurgicale au genou. La rachianesthésie est facile à réaliser, et les facteurs de risque, bien que présents, ne sont pas sérieux. De tels accidents ne sont pas rares et il faut maintenir un niveau élevé d’attention pour les prévenir.

Mots-clés: brûlure, rachianesthésie, radiateur

BIBLIOGRAPHY


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