

Research Article

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A Comprehensive Analysis on Compartment Syndrome of the Thigh

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Abstract

The surgical emergency known as compartment syndrome of the thighs carries a high risk of mortality as well as morbidity. The purpose of this review was to evaluate the degree of effect regarding compartment syndrome of the thighs. This evaluation included a thorough literature review in order to accomplish the study's objective. Also, relevant literatures were adopted and specific search terms including " thigh" and syndrome" utilized while data achieved from EBSCO and Google Scholar libraries. According to some writers, to be able to reduce the possibility of recurring ischemic alterations, all muscle compartments of the implicated limb must be released during the fasciotomy. To be able to prevent fibrosis and contracture, which impair transfers and lower extremity dressing abilities in patients with concurrent spinal cord injury, surgical decompression is necessary. There is currently a dearth of information on the causes, effectiveness of one versus two fasciotomies, types of wound closure, and complication rates of compartment syndrome of the thighs.

Keywords: syndrome; thigh; muscles

Introduction

One of the more frequent sources of medical litigation, with severe malpractice risk, is compartment syndromes [1]. An uncommon orthopedic emergency known as compartment syndrome of the thighs occurs when the pressure inside the osteofascial compartment of the leg is higher than the capillary perfusion pressure gradient, leading to cellular anoxia, muscle ischaemia, and death [2]. Schwartz et al. [3]. reported a 47% death rate. Age, polytrauma, femoral fractures, and time to fasciotomy appear to be factors impacting the functional prognosis of thigh compartment syndrome 4 and there is just a small amount of information about how to tackle this issue. This review was motivated by the dearth of literature on the subject. The goal of this study is to comprehensively analyze the information that is currently available on the factors that contribute to thigh compartment syndrome, the number of fasciotomy incisions (particularly, one versus two incisions), the techniques used to close the wound, and the side effects.

Methods

This evaluation included a thorough literature review in order to accomplish the study's objective. Also, relevant publications for the literature review were adopted and specific search terms including " thigh"

and syndrome" utilized while data achieved from EBSCO and Google Scholar libraries.

Results

According to the literature review, blunt trauma causes the vast majority of compartment syndrome of the thighs. Additionally, according to some writers, to be able to reduce the possibility of recurring ischemic alterations, all muscle compartments of the implicated limb must be released during the fasciotomy. In order to prevent fibrosis and contracture, which impair transfers and lower extremity dressing abilities in patients with concurrent spinal cord injury, surgical decompression is necessary.

Discussion

Contrary to compartment syndrome of the calf, compartment syndrome of the thighs is less common. We sought to learn useful information about the present state of care for this severe post-traumatic complication through this systematic review. Due to the small patient population arrived from some studies; no solid conclusions on the need for a one-incision versus two-incision procedure for fasciotomy, wound closure methods, and complications could be drawn. However, from gathering of reviews, we were able to confirm that the majority of instances of thigh

compartment syndrome are caused by blunt trauma and are primarily diagnosed clinically. Some authors opined those measurements of compartment pressure are crucial for obtunded individuals. 5,6 Also, decompression of the anterior and posterior compartments with a single lateral incision was advised by Tarlow et al. [7].

Conclusion

We concluded from our evaluation that more research is needed on the causes, usage of one versus two incisions for fasciotomy, techniques of wound closure, and complication rates of compartment syndrome of the thighs.

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