



REGIONAL CHARACTERISTICS OF KELOID SCAR FORMATION AFTER CESAREAN SECTION IN SURKHANDARYA REGION, UZBEKISTAN

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ABSTRACT

Keloid formation is a pathological skin response characterized by excessive fibroblast proliferation and abnormal collagen deposition at the site of dermal injury. Cesarean section (CS) scars are a common site for keloid formation, particularly among women with genetic predisposition, darker skin types, or a history of abnormal wound healing. Keloids can cause functional limitations, pain, itching, cosmetic concerns, and significant psychological stress. Despite the clinical significance of keloid scars following CS, there is limited regional data, particularly in Surkhandarya region, Uzbekistan, where environmental factors such as high temperatures and dry climate may influence scar pathophysiology.

This study aims to determine the prevalence, risk factors, and clinical characteristics of keloid scar formation following cesarean section among women in Surkhandarya region. A descriptive cross-sectional design will be employed, including women who underwent CS within the last five years. Data will be collected through physical examination, patient questionnaires on scar-related symptoms, photographic documentation, and review of medical records. Risk factors such as number of cesarean deliveries, surgical technique, postoperative infection, family history of keloids, skin type, and environmental exposure will be analyzed using statistical modeling.

Preliminary findings suggest that women with multiple prior cesareans, history of postoperative infection, or dark skin types are at higher risk of keloid development. Lesion size, location, and severity of symptoms, including pruritus and functional limitation, were found to correlate with the patient's quality of life. Management approaches evaluated include intralesional corticosteroid injection, surgical excision, silicone therapy, and postoperative pressure therapy.

This study highlights the clinical, psychosocial, and regional factors contributing to keloid scar formation after CS. The results provide insights for developing prevention strategies, individualized patient counseling, and optimizing surgical and postoperative care

in Surkhandarya region. Furthermore, these findings contribute to the broader understanding of keloid pathophysiology, supporting both clinical practice improvements and future research directions in scar management.

Aim. The aim of this study is to analyze the prevalence, risk factors, and clinical features of keloid scar formation after cesarean section among women in Surkhandarya region and to provide evidence for improved prevention and postoperative care strategies.

Methods. A descriptive cross-sectional study will be conducted among women who have undergone cesarean section in local healthcare facilities. Scar characteristics will be assessed through physical examination, patient questionnaires, and review of medical records. Risk factors such as age, skin type, surgical technique, postoperative care, infection history, and environmental conditions will be analyzed.

Expected Results. The study is expected to identify key clinical and regional factors contributing to keloid scar formation and support the development of targeted interventions and rehabilitation strategies, improving postoperative outcomes and quality of life for affected women in Surkhandarya region..

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