

Beyond The Incision: Skin Mysteries After Total Knee Replacement

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INTRODUCTION:

Total knee replacement (TKR), has become a common surgical intervention for individuals with debilitating knee osteoarthritis. One under-reported complication is neuropathy dermatitis, an enigmatic and discomforting condition distinguished by skin changes, redness and itchiness at the surgical site.¹ The primary focus of this report is to provide an insight on the clinical presentation of this condition, elucidating the hallmark symptoms that manifest after surgery.

CASE REPORT:

A 61-year-old gentleman who had underwent left TKR, complaining of skin changes at the surgical site associated with itchiness and redness during 4 months review in clinic post operatively. He did not have any joint stiffness, tenderness or any discharge from the surgical site. He also denied history of dermatological disorder in the past. Clinical examination of the left knee showed skin eruption at the anteroinferior aspect, lateral to previous TKR surgical incision. It was dry, well-demarcated, mild erythema, however no joint tenderness, knee stiffness or deformity. Plain radiograph was unremarkable, no loosening of implant. Patient was reassured and was given regular follow up to observe the skin lesion.



Figure 1: Skin lesion lateral to previous TKR midline incision at the anteroinferior aspect of left knee



Figure 2: Skin lesion lateral to previous TKR midline incision at the anteroinferior aspect of left knee.

CONCLUSION:

Neuropathy dermatitis following total knee replacement presents a unique intersection of orthopedic and dermatologic considerations. It emerges due to the disruption of autonomic innervation subsequent to injury to infrapatellar branch of saphenous nerve, and may become apparent over a span of several months to years after the surgery.²

Understanding of its etiology and identifying clinical manifestation of neuropathy dermatitis following TKR can significantly contribute to post-op care, hence, alleviating patients' distress and enhance their quality of life.

REFERENCES:

1. Sharquie K.E., Noaimi A.A., Alaboudi A.S. Neuropathy dermatitis following surgical nerve injury. *Case Rep Dermatol Med.* 2011;2011:234185.
2. James N.F., Kumar A.R., Wilke B.K., Shi G.G. Incidence of encountering the infrapatellar nerve branch of the saphenous nerve during a midline approach for total knee arthroplasty. *J Am Acad Orthop Surg Glob Res Rev.* 2019;3(12):e19.