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# Associated Fracture of Spinal Tuberosity with Anterior Root Injury of Lateral Meniscus

*Mohamed Amine Gharbi, Rami Triki, Mohamed Hedi Ezzine, Houssein  
Eddine Chahed, Anis Tebourbi, Ramzi Bouzidi, Khelil Ezzaouia, Mouadh  
Nefiss*

*Department of Orthopedic and Trauma Surgery, Mongi Slim Marsa University Hospital  
Center, Tunis, Tunisia*







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# Disclosures:

- Authors (or a member of their immediate family) **DO NOT** have a financial interest or other relationship with a commercial company or institution.
- Authors declare that there is **NO CONFLICT OF INTEREST.**





# BACKGROUND:

- Anterior spinal tuberosity has a very close attachment to the ACL and the anterior root of lateral meniscus
- Concomitant lesion of these 3 components is anatomically possible and can be evaluated by arthroscopy



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# OBJECTIVE:

- The aim of our work is to describe this lesion we found in three patients



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# METHODS:

- This was a descriptive and retrospective study about three patients in which we found this pattern of injury
- We described the CT scan finding, the surgery technique, and functional results



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# RESULTS:

- We had 3 patients who had fractures of anterior spinal tuberosity
- CT scan showed type 3A of Meyers and McKeever fracture
- Arthroscopy confirmed the diagnosis and showed an associated lesion with the anterior root of lateral meniscus



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# RESULTS:

- All the patients had reattachment of the spinal tuberosity with k-wires and cerclage which were removed within 45 days
- On the last follow-up, they had no knee stiffness and satisfactory functional results



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# DISCUSSION:

- Anterior root of lateral meniscus is closely attached to the anterior spinal tuberosity and the ACL
- Fractures of anterior spinal tuberosity are equivalent to ACL rupture [1,2]



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# DISCUSSION:

- When associated to desinsertion of anterior root of lateral meniscus, it will disrupt the anatomy and biomechanics of the meniscus [3]
- Reattachment of the spinal tuberosity allows also the reattachment of the meniscal root [4]
- This lesion is scarce in the literature



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# CONCLUSION:

- When facing an anterior spinal tuberosity fracture, attention should be given to the meniscal lesions especially the anterior root of lateral meniscus due to its proximity



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