

Pellegrini-Stieda Lesions in the Pediatric Population: A Case Series

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BACKGROUND

Pellegrini-Stieda lesions are a calcified mass found on the medial femoral condyle of the knee. They are thought to be post traumatic in origin. It is proposed to be an avulsion fracture of the medial collateral ligament origin; however, it has also been found to represent the medial gastrocnemius, vastus medialis, adductor magnus, or medial patellofemoral ligament origins

PURPOSE

We present a descriptive case series of pediatric Pellegrini-Stieda lesions and evaluate demographics, injury mechanism, management, and outcomes.

METHODS

- Retrospective study
- Patients under 18 years at a tertiary children's hospital diagnosed with a Pellegrini-Stieda lesion on imaging
- Data regarding patient demographics, mechanism of injury, physical exam, radiographic findings, treatment, and outcomes were collected
- Descriptive statistical analysis was conducted



Fig 1: Pellegrini-Stieda Lesion of the knee

RESULTS

- 7 patients: 1 female, 6 males
- Mean age: 16 years (14-17)
- All presented to the office or emergency room with a known injury or trauma
- 5/7 (71.4%) occurred while engaged in competitive sports (basketball, soccer, football) and 2/7 (28.6%) were involved in trauma (fall from height, ATV accident).
- Treatment: 5/7 (71.4%) required surgery for pathologies associated with the injury (meniscal repair, partial meniscectomy, MPFL reconstruction, tibial spine fixation, ACL reconstruction) and of those 1/5 (20%) required MCL repair due to instability. The remaining 2/7 patients had isolated MCL tears which were treated conservatively.
- Outcomes: one patient presented initially 3 months out from injury at the time of diagnosis and was lost to follow up after initiation of physical therapy. The average follow-up for the remaining 6/7 patients was 5.8 months (range 2-9 months). These patients reported resolution of knee pain symptoms and return to full activities at the time of last follow up.

CONCLUSION

Pellegrini-Stieda lesions in this case series were found after traumatic or sports related injuries. They were highly associated with other knee injuries which required surgical intervention. Conservative management was sufficient in cases with isolated injuries to the MCL.

REFERENCES

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