

## 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; however, there is minimal literature regarding their significance in the adult population and no published cases in the pediatric population. It is proposed to be an avulsion fracture of the medial collateral ligament origin. Due to their rarity and unknown significance, they remain to be further elucidated in the pediatric population.

**Materials/Methods:** Our retrospective study included 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.

**Results:** We identified seven patients with Pellegrini-Stieda lesions. Their mean age was 16 years (14-17). All presented to the office or emergency room with a known injury or trauma. 71.4% occurred while engaged in competitive sports and 28.6% were involved in trauma. The majority of patients, 85.7%, had no lesion present on initial imaging but did have a lesion on follow up radiographs or MRI. With regards to treatment 71.4% required surgery for pathologies associated with the injury (meniscal repair, partial meniscectomy, MPFL reconstruction, tibial spine fixation, ACL reconstruction) and of those 20% required MCL repair due to instability. The remaining 2/7 patients had isolated MCL tears which were treated conservatively. The average follow-up 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.

**Conclusions:** 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.

**Images / Graph / Table**

