

## A NOVEL APPROACH TO TREAT LEG LENGTH DISCREPANCIES

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**Introduction:** Leg length discrepancies (LLDs) are a common phenomenon in the general community with 23% of the population having a discrepancy of 1 cm or more. The causes of LLDs can be subdivided into congenital disorders or acquired physal disruption.

**Discussion:** A 11 year old girl with no known medical illness under our paediatric ortho follow up presented to us with left leg shortening for the past 6 years. During her follow up, we noted the left leg shortening was increasing in trend from 2 cm on presentation to 4.5 cm in 2018, (3cm shortening at the tibia and 1.5cm at the femur of the left lower limb). Epiphysiodesis was scheduled for her but she was unable to pay for the costly eight plate that was recommended to be used. We then decided to improvise on the technique using a 1/3 tubular plate 2 holes using the tension band principle which was readily available in our hospital. Children predicted to have a discrepancy of 2-5 cm at skeletal maturity are considered as candidates for epiphysiodesis, which has been described as early as the 1933 by Phemister. If untreated, this can lead to back pain, functional scoliosis and inefficient gait. Other methods include using staples by Blount and Clarke, eight plate by Stevens and even drilling using a low speed high torque drill by Bowen. Follow up was done at 6 months, the discrepancy was reduced to 3cm. The only potentially perceived difference in the one-third tubular plate may be the absence of a central guide hole which slightly increase the technical difficulties or operating time.

**Conclusion:** We have shown efficacy in regard to overall correction time. Additionally the system is highly economical and is likely to be already available in the large majority of centres.