Case report:

Magnetic Resonance Image Findings in A Rare Case of Bilateral Knee Pain in A Small Patella Syndrome Patient

Dr Faris Indra Prahasta Bin Didi Indra[1], Dr Loo Wen Chen[2], Prof Dr Mohd Anuar Ramdhan Bin Ibrahim[3], Dr Ong Lik Han[4]

Abstract:

Congenital aplasia or hypoplasia of the patella can manifest as an isolated disease or more commonly part of rare genetic disorders such as small patella syndrome (SPS). To our knowledge this is the first report of a patient with small patella syndrome who complained of bilateral knee pain with no preceding injury. Magnetic resonance imaging (MRI) revealed early degenerative changes of the knee joints which had not been mentioned in any literature. The MRI findings in our case are important as it would help in finding the cause of the pain and allow early treatment to be initiated thus delaying the progression of the arthritic changes.

Keywords: Small patella syndrome; patella; magnetic resonance imaging; osteoarthritis; congenital

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Introduction:

Small patella syndrome (SPS) is a rare autosomal dominant disorder[1,2]. It is characterized by small or absent of uni /bilateral patella with abnormalities seen at the pelvis and feet that include hypoplasia of the ischium, irregular ossification at the ischiopubic junction, infra-acetabular axe cut notches and flat feet [1,2]. The presentation of congenital partial or total absence of patella varies from recurrent patella dislocation in younger patients to knee pain due to severe arthritic changes in elderly[3]. We report a magnetic resonance imaging findings of a 12-year-old girl complained of having bilateral knee pain who has bilateral absent of patella with underlying small patella syndrome. To our knowledge this is the first case report of MRI findings in a SPS patient with missing patella in both knees.

Case Report:

We report a case of 12-year-old female who presented with gradual onset of bilateral knee pain associated with weakness of knee extension that was more severe on the right lower limb for a month duration. She denied having any preceding trauma and fever. However, she was able to participate in normal school physical education activities involving running and jumping. There was no significant antenatal history and the milestone is normal. On physical examination she does not exhibit any syndromic features and stands almost the same height as the parents. Her gait pattern revealed a shortened stance phase over right lower limb and excessive swinging of bilateral hip forward to aid in full extension of knee. She was unable to squat unsupported and stand from squatting position without assistance. With

1. Dr Faris Indra Prahasta Bin Didi Indra, Faculty of Medicine and Science Universiti, Malaysia, Sarawak.
2. Dr Loo Wen Chen, Faculty of Medicine and Science Universiti, Malaysia, Sarawak.
3. Prof Dr Mohd Anuar Ramdhan Bin Ibrahim, Faculty of Medicine and Science Universiti, Malaysia, Sarawak.
4. Dr Ong Lik Han, Faculty of Medicine and Science Universiti, Malaysia, Sarawak.

Correspondence: Dr Faris Indra Prahatsa bin Didi Indra, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia. email : prahasta_82@yahoo.com.