

Conference Abstract

DAY 2 16th September 2023 (Saturday) POSTER 11.00 am-12.00 pm Scientific Session 7

Concurrent appearance of rare sacral hiatus with sacrococcygeal synostosis A case report

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Background: Dorsal aspect of sacrum in the caudal region presents arched sacral hiatus formed due to failure of fusion of 5 th sacral lamina. Symphysis joint is present between the sacrum and coccyx body. An intercornual ligament was found between cornuaes of Sacrum & coccyx. The Sacral hiatus and sacrococcygeal cornuae are the important landmark for caudal epidural anaesthesia but the morphological variations may hinder their location.

Aim: To study a rare sacral hiatus associated with synostosis of sacrococcygeal region.

Methods: While segregating the dry human bones in the osteology lab of department, we spotted a variant shape of sacral hiatus along with fusion of sacrum & coccyx. We have calculated the depth and other dimensions pertaining to bony projection of sacral hiatus and fused sacrococcygeal cornuae using a vernier caliper.

Result: This study reported "M" shaped sacral hiatus. The length of sacral hiatus from base to apex of sacrum was 1.7cm. Additionally synostosis of apex of sacrum with base of coccyx in conjunction with synostosis of sacrococcygeal cornuae was observed. The intercornual sacral canal transverse and vertical diameters were 0.5cm and 0.8cm respectively. Other measurements pertaining to bony projection & synostosis of cornuae was measured and reported.

Conclusion: The knowledge of the possible extra bony projection of sacral hiatus with its measured dimensions and the cornual synostosis could be beneficial for surgeons, radiologists & orthopedicians when considering caudal epidural anaesthesia. Aforementioned variations of sacrococcygeal parts may pose a probable cause of coccydynia or it may also lead to extended labour and perineal tear. **Keywords:** Sacral hiatus, coccyx, synostosis