

JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH

How to cite this article:

VIKRAM D, BALDEEP S, SUNIL S, ANJAY P. INTRAMEDULLARY SPINAL CORD ABSCESS AS A COMPLICATION OF THE DERMAL SINUS. Journal of Clinical and Diagnostic Research [serial online] 2010 October [cited: 2010 October 23];4: 3319-3320.

Available from

http://www.jcdr.in/article_fulltext.asp?issn=0973-709x&year=2010&volume=&issue=&page=&issn=0973-709x&id=822

IMAGES IN MEDICINE

Intramedullary Spinal Cord Abscess as a complication of the Dermal Sinus

VIKRAM D*, BALDEEP S**, SUNIL S***, ANJAY P****

ABSTRACT

Intramedullary Spinal Cord Abscesses secondary to congenital dermal sinus are infrequently seen in paediatric age group. The thoracic spinal cord is most often involved. Although rare, yet treatable, it is imperative that we have knowledge of its existence because misjudgement and delay in necessary treatment may lead to complete paralysis below the lesion. We present a similar case of a 5 year old girl.

*Clinical Fellow, Department of Paediatrics, Addenbrookes Hospital, Cambridge, UK; **MD, Director & Head, Department of Paediatrics, Deep Hospital, Model Town, Ludhiana, Punjab; ***DCH, MRCPch, Specialist Registrar, Department of Paediatrics, Addenbrookes Hospital, Cambridge, UK; ****MRCPch, Specialist Registrar, Department of Paediatrics, Addenbrookes Hospital, Cambridge, UK

Corresponding & First Author
Dr Vikram Dhawan
Clinical Fellow
Department of Paediatrics
Addenbrookes Hospital
Cambridge, UK
drvikramdhawan@gmail.com
vikram.dhawan@addenbrookes.nhs.uk

Intramedullary abscess of the spinal cord is uncommon in children, accounting for only 38 cases which were identified since 1830 [1],[2],[3],[4]. A 3 year old girl was admitted with severe dorsal root pain and purulent discharge from an infected para-spinal dermal sinus at the level of T1-T2. She was previously operated at 2 months of age at another setting, pus was removed superficially and the wound was closed without an MRI scan or a Sinogram. MRI of the spine, on this occasion, showed 2 small intra spinal collections which were suggestive of an infected dorsal dermal sinus, with associated cord and lower brainstem oedema [Table/Fig 1].

The patient was a hospital delivery at term, with a dermal sinus which had inflamed over time. On examination, it was found that her vitals were stable, she was conscious and she was oriented to time, place and person, with no neurological deficits. There was no h/o any infectious contact, convulsion or any injury. The patient was eventually referred to a super speciality centre and was operated there.

Spinal cord abscesses are usually associated with congenital dermoid lesions or sinus tracts [5],[6],[7] which are most commonly present in the lumbar or the midthoracic cord [8], but they may also occur in conjunction with congenital dermal sinuses or following trauma [9],[10]. This case illustrates the importance of

an MRI scan and/or a sinogram to trace the extent of pustular tract and to excise it.



[Table/Fig 1]:

References:

- [1] Arzt PK (1944) Abscess within the spinal cord: review of the literature and report of three cases. *Arch Neurol Psychiatry* 51:533-543
- [2] Chan CT, Gold WL (1998) Intramedullary abscess of the spinal cord in the antibiotic era: clinical features, microbial etiologies trends in pathogenesis, and outcomes. *Clin Infect Dis* 27:619-626
- [3] DiTullio MV (1997) Intramedullary spinal abscess: a case report with a review of 53 previously described cases. *Surg Neurol* 7:351-354
- [4] Morandi X, Mercier P, Fournier H, Brassier G (1999) Dermal sinus and Intramedullary spinal cord

- abscess: report of two cases and review of the literature. Childs Nerv Syst 15:202-208
- [5] Blacklock JB, Hood TW, Maxwell RE. Intramedullary Cervical Spinal Cord Abscess. Case report. J Neurosurg 1982; 57: 270-3
- [6] Murphy KJ, Brunberg JA, Quit DJ, Kazanjian PH. Spinal Cord Infection: myelitis and abscess formation. AJNR Ann J Neuroradiol 1998;19:341-8
- [7] Benzil D, Epstein MH, Knuckey NW, Intramedullary epidermoid associated with an intra medullary spinal abscess secondary to a dermal sinus. Neurosurgery 1992;30:118-21
- [8] Pleasure D, De Vivod. The nervous system. In: Rudolph CD, editor. Rudolph's pediatrics. 21st ed. New York: Mc Graw-Hill; 2003
- [9] Menzes AH, Graf CJ, Perset GE. Spinal cord abscess: a review. Surg Neurol 1977; 8:461-7
- [10] Marwah RK, Khosla VK, Agarwal KC, Kataria S. Intramedullary spinal cord abscess. Indian Pediatr 1985;22:71-4