

Ganglion of the Sternoclavicular Joint: First Case Report from Kashmir Valley

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ABSTRACT

Ganglion cyst is a common swelling observed near joints of hands and feet, usually occurring in adult population. Ganglia are rare in the pediatric population. Additionally, sternoclavicular joint ganglia are also exceedingly rare. Diagnosis is usually based on clinical examination, radiological investigations, or fine-needle aspiration cytology (FNAC). We hereby report a case of an 8-year-old girl who presented with a non tender, non erythematous swelling over the right sternoclavicular joint for 2 months. FNAC of the lesion was done and diagnosis of ganglion was made. The swelling disappeared completely on aspiration. The aspiration acted both as diagnostic and therapeutic modality. The patient is under follow-up for the chance of recurrence. The case illustrates the importance of keeping ganglion within the differential diagnosis for palpable subcutaneous masses, even in young children, especially when they are seen to connect to the joint. To the best of our knowledge this is the first time to report such a case from Kashmir valley.

Keywords: Ganglion cyst, sternoclavicular joint, pediatric age

INTRODUCTION

Ganglion cyst is a common swelling observed near joints of hands and feet, usually occurring in adult population. They are lined by fibrous tissue, contain mucinous fluid, and are attached at the base by a tendon sheath or narrow stalk to the

underlying joint capsule. Regardless of age, ganglion cysts are mostly located on the appendicular skeleton especially hand and wrist, and are extremely rare in the sternoclavicular joint.[1] There have been few papers reporting ganglion cysts originating from the sternoclavicular joint, with most of these cases developing in children. We hereby report a case of ganglion cyst of sternoclavicular joint in pediatric age group diagnosed on fine-needle aspiration cytology (FNAC).

CASE REPORT

8-year-old female child presented with painless swelling in the neck for a period of over 2 months. It was a subcentrimetric swelling at time of the presentation. There was no history of trauma to that region. On palpation, the swelling was well defined, less than 1 cm in diameter, nonmobile, present over the right sternoclavicular joint. It was a nontender, nonerythematous swelling, not attached to the overlying skin. FNAC was done which yielded thick, clear gelatinous material. Microscopically, the smears showed single histiocyte like mononuclear cells with central ovoid nuclei and abundant cytoplasm against a background of abundant myxoid material [Figures 1]. The swelling immediately disappeared on aspiration. The procedure of FNAC was both diagnostic as well as therapeutic, and the patient is under follow-up for any recurrence.

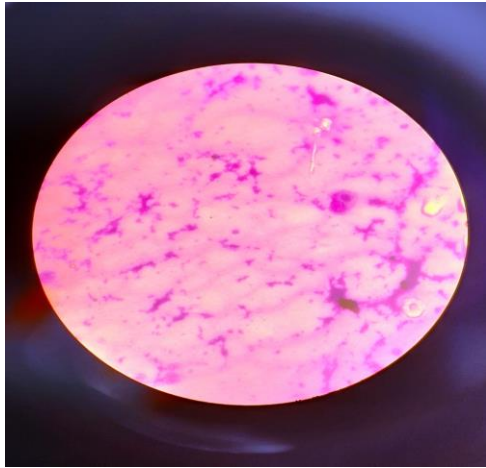


Figure 1: Photomicrograph shows mononuclear histiocyte like cells in a myxoid background. (MGG stain; 40X)

DISCUSSION

Ganglion cysts, are fluid-filled soft tissue swellings that occur most commonly over the dorsal surface of the wrist. These ganglia can occur at any point in life although their incidence is the highest between the second and fourth decades [2]. Cases of pediatric ganglia are notably rare with one study citing that 10% of ganglia occur in patients under the age of 20 and less than 2% occur in children under the age of 10 [3]. In the general population, 70% of ganglia are reported to be located on the dorsal wrist with another 20% on the palmar aspect of the hand [2]. Sternoclavicular ganglia fall within the remaining 10% of miscellaneous anatomic sources. Ganglion cysts, in general, are associated with a history of trauma, though the etiology is not clearly elucidated. Mucin accumulates within the cyst through a stalk-like connection to the joint capsule[4]. History of trauma was lacking in our case. There have been a few cases published regarding sternoclavicular joint ganglia being diagnosed cytologically or radiologically. Most of the authors have described it radiologically comparing the sensitivity of diagnosis on USG versus computed tomography scan or magnetic resonance imaging (MRI). A similar case was reported by Seth D et al.[5] in which 8 year old girl presented with a neck swelling . USG was done which defined the lesion as cystic. The case was diagnosed on FNAC as ganglion.

In a study by Haber et al., five cases of sternoclavicular ganglion cysts was done, most of which were diagnosed on MRI and confirmed on histopathology.[6]. Treatment of ganglia usually includes injection of sclerosing fluids or steroids. In consideration of the benign nature of these lesions, observation of the asymptomatic patient is a perfectly reasonable treatment plan. Spontaneous resolution of ganglion cysts occurs in two-thirds of cases.[7] This patient was treated by FNA alone and is under follow-up for any chance of recurrence

CONCLUSION

This case report highlights the importance of keeping ganglion cyst in the differential diagnosis of neck swellings in pediatrics age group, especially over sternoclavicular joint.

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REFERENCES

1. Esteban JM, Oertel YC, Mendoza M, Knoll SM. Fine needle aspiration in the treatment of ganglion cysts. *South Med J* 1986; 79:691-3.
2. S. M. Dyer and B. P. Simmons, "The wrist and hand," in *Rheumatology*, vol. 1, p. 624, Mosby, St. Louis, 2015.
3. C. L. Nelson, S. Sawmiller, and G. S. Phalen, "Ganglions of the wrist and hand," *The Journal of Bone & Joint Surgery*, vol. 54, no. 7, pp. 1459–1464, 1972.
4. Adam SI, Karas DE, Lesnik G. Rare pediatric neck mass: Sternoclavicular joint ganglion cyst. *Int J Pediatr Otorhinolaryngol* 2011;6:361-2.
5. Sethi D, Lamba S, Gupta B, Swain M. A rare case of ganglion cyst of sternoclavicular joint diagnosed and treated by fine-needle aspiration cytology. *J Clin Sci* 2017; 14:204-6.

6. Haber LH, Waanders NA, Thompson GH, Petersilge C, Ballock RT. Sternoclavicular joint ganglion cysts in young children. *J Pediatr Orthop* 2002;22:544-7.
7. MacCollum MS. Dorsal wrist ganglions in children. *J Hand Surg Am* 1977;2:325.

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