



DORSAL WRIST GANGLION - OUR EXPERIENCE IN ITS MANAGEMENT AT TERTIARY CARE CENTER

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**ABSTRACT**

Ganglion cyst is the most common soft tissue tumor of the hand, which commonly occurs over the dorsal aspect of wrist. It arises from a pedicle in tendon sheath or joint capsule and located over scapholunate ligament. There are a number of treatment modalities for ganglion, such as observation, aspiration, intralesional steroid injection, sclerotherapy and surgical excision.

**KEYWORDS :**

Ganglion cyst over dorsal wrist, cyst size and location, observation, aspiration and steroid injection, surgical excision.z

**INTRODUCTION**

Ganglion cyst is the most common soft tissue tumor of the hand. 60-70 % are present on dorsal aspect of wrist. They may affect any age group, however they are more common in 20s-40s. Although the pathogenesis is unclear, history of trauma is seen in 10% of cases. These cysts are filled with fluids, and most often, they appear and disappear very quickly. Majority of them do not require treatment unless the cyst is painful, alters function of the wrist or deformed appearance.

They are the most common tumor like conditions in the hand and wrist which usually arise from a pedicle in tendon sheath or joint capsule and located over scapholunate ligament. There are a number of treatment modalities for ganglion, such as observation, aspiration, intralesional steroid injection, sclerotherapy and surgical excision, but none of these modalities has been the standard or best treatment

**Aims And Objectives :** To study the size, symptoms at presentation, management done and outcomes of ganglion cyst.

**MATERIALS AND METHODS-**

**Study Type :** A Retrospective analysis  
**Study Centre :** Department of General Surgery, Maharajah's Institute of Medical Sciences, Vizianagaram  
**Study Period:** 2 years, June 2019 to May 2021. Study subjects : All the cases of dorsal wrist ganglion.

**Study Method-**Dorsal wrist ganglion cases were studied with respect to the size of the cyst, Symptoms at presentation, management done and outcomes. Diagnosis of ganglion was based on history and clinical examination. All patients were informed and explained about the lesion and their treatment plan. In some patients, radiological investigations like X-ray and ultrasonography were done to rule out other lesions.

**Inclusion Criteria**

1. Dorsal wrist ganglion of at least 1 cm in size
2. Patients older than 15 years (15-70 years)
3. Patients who are willing for follow-up.

**Exclusion Criteria**

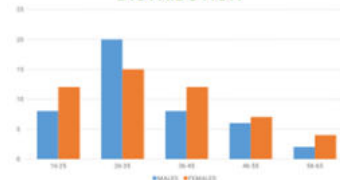
1. Pediatric patients below the age of 15 years.
2. Ganglion cysts present anywhere other than dorsal wrist.

**RESULTS-**

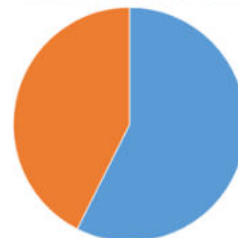
Out of 94 cases which presented to Surgical OPD -57 cases are of size greater 2cm. 14 cases presented with pain, 6 cases presented with tingling sensation 17 cases for cosmetic appearance and apprehension of tumor.



AGE AND GENDER DISTRIBUTION



SIZE DISTRIBUTION



SYMPTOMS	CASES
1 PAIN	14
2 TINGLING SENSATION	6
3 OTHERS (COSMETIC, TUMOR APPREHENSION)	74

**DISCUSSION-**

Carpal ganglion cyst is the most common benign soft tissue tumor, including approximately 60-70% of the tumors of the hand and wrist area.

The mean age of our patients at the time of presentation was 24.7 years. Our study involved 94 patients with a male/female ratio of 2:3.

MANAGEMENT	CAUSE	NO OF CASES
1 WAIT & WATCH (OBSERVATION)	CYST LESS THAN 1 CM SIZE	36
2 IMMOBILIZATION (WRIST BRACE)	CYST ARISING FROM JOINT CAPSULE	8
3 ASPIRATION & STERIOD INJECTION	CYST GREATER THAN 2 CM SIZE	35
4 SURGICAL EXCISION	RECURRENTS FROM PREVIOUS MANAGEMENT AND PAINFUL CYST	15



Fig 1:- Aspiration & Injection Of Steroid



Fig 2:- Surgical Excision Of Ganglion Cyst



Fig 3:- After Cyst Excision

Success by Surgical excision was 86% and aspiration & steroid injection was 75%. Recurrence is the most common complication.

#### CONCLUSION-

Exact Pathogenesis of ganglion cyst is still unknown. Recurrence after management was the most common complication of dorsal wrist ganglions. **Surgical excision is the most successful form of treatment** followed by aspiration & steroid injection into the ganglion.

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