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Research Article

CLINICAL CHARACTERISTICS AND POSTOPERATIVE COMPLICATION OF PATIENTS UNDERWENT HYDROCELE SURGERY AT TERTIARY CARE HOSPITAL

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Abstract:

Objective: To assess the clinical characteristics, post-operative complications and recurrences rate in patients who underwent hydrocele surgeries at tertiary care Hospital.

Material and methods: This was the prospective study, and has been carried in the general surgery department of LUH/Jamshoro. Study duration was one year 2014 to 2015. All the cases were selected from OPD of general surgery and after diagnosis of hydrocele were admitted in the ward for surgical treatment. All the selected patients underwent different surgical procedures according to conditions. After surgeries patients were discharged on stable condition, and were advised for routine follow up for minimum 6 months. During follow-up period all the postoperative complications and recurrences rate were documented in the predesigned proforma.

RESULTS: Total 41 cases were incorporated with diagnosis of hydrocele; mean age was found 41.43±4.04 years. Right was more involved in 65.85% patients as compared to left side 34.15%. Swelling was in all cases, feeling discomfort found in 80%, following by pain, nausea and vomiting were found with percentage of 14.63% and 9.75% respectively. According to postoperative complications pain was in 04(9.75%), haematoma in 2 cases, edema was found in 3 patients, while recurrences was found in 2 cases out of 41, and 10 cases were not come in follow-up.

CONCLUSION: In present study it is concluded that postoperative complications and recurrences rate of hydrocele was very low as compared to literature. Surgical techniques should be applied according to disease condition and its severity.

Key words: Hydrocele, clinical characteristics, postoperative complications

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INTRODUCTION:

Hydrocele is the unusual collection of the serous liquid in possible space in between parietal and the visceral layer of tunica vaginalis [1]. In the dominant part of influenced adolescent, hydrocele is the idiopathic and is the acquired in origin [1]. It is pronounced in 15th century through Ambroise Pare. Hydrocele is the most widely recognized reason for painless non-intense scrotal swelling in the males [2]. It is most well-known kind of scrotal swelling, with an expected rate of 1% of the grown-up male gender population [3,4]. Hydroceles may vary in size yet a large portion of the cases are asymptomatic. Acquired hydroceles are typically increased gradually and not that they are greatly alarming. Bigger hydroceles may result in prolonged pain in the scrotum or in the lower back and scrotal injury causes like as testicles [5,6]. Communicating hydrocele might be of little size in every morning except become greater everywhere throughout the day as the patient is exercised. Marked characteristics on clinical examination are the smooth tense mass of the scrotum which trans-illuminates up certainly. It may be helpful in recognizing a hydrocele from the hernia or the mass, strong in the nature. Communicating hydrocele might occur with the inguinal hernia indirect [7]. A hydrocele frequently happens on one side, yet can likewise influence both sides. The collection can be the marker of injury physically, contamination, tumors, infection or the surgery of the varicocele [8] however the cause is usually unknown. Indirect inguinal hernia can increase the cause of hydrocele. A hydrocele of the testis may not usually be believed to affect fertility. Though, it might be demonstrative of different variables that may influence fertility. A large portion of the patients deny the specialist for surgical methodology of hydrocele as a result of shyness and fear of improvement of infertility and impotence [9,10]. Several operative and non-operative management options for the hydrocele and as different surgical techniques are used for the hydrocelectomy. All procedures are used by the surgeons but still it has been reported that among the different procedures which method is more suitable and with less complications. Different studies showed different rates of post-operative complications with big differences [5,11,12]. Therefore, the aim behind this study was to assess the postoperative complication rate after hydrocele surgery in our setup.

MATERIAL AND METHODS:

This was the prospective study, and has been carried in the general surgery department of Liaquat University Hospital Hyderabad/Jamshoro. Study duration was one year from 2014 to 2015. All the cases were selected from the OPD of general surgery and after diagnosis of hydrocele were admitted in the ward for surgical treatment. After admission all the routine lab investigations were carried. Repeat ultrasound of the pelvis and scrotum was done. All the cases less than 18 years of age, having severe comorbidities like uncontrolled diabetes and chronic hepatitis etc, were excluded from the study. Patients diagnosed with carcinoma were excluded, and those suspected for carcinoma were referred for further investigations and required treatment. All the selected patients underwent different surgical procedures according to conditions. Surgeries were done by experienced and skilled surgeons more than 5 years' experience. After surgeries patients were discharged on a stable condition, and were advised for routine follow-up for a minimum of 6 months. During the follow-up period all the postoperative complications and recurrence rates were documented in the pre-designed proforma. All the data was recorded in the proforma and analyzed in SPSS program version 20.

RESULTS:

In our study total 41 cases were incorporated with diagnosis of hydrocele, mean age was found 41.43±4.04 years, history of hydrocele was found less than 1 year in 25 (60.97%) patients and more than 1 year was in 16 (39.02%). Right side was more involved in 65.85% patients as compared to left side 34.15% results showed in **Table:1**.

According to the clinical characteristics swelling was in all cases, feeling discomfort found in 80% of the cases, followed by pain, nausea and vomiting were found with percentages of 14.63% and 9.75% respectively results showed in **Fig:1**.

According to postoperative complications pain was in 04 (9.75%), haematoma in 2 cases, edema was found in 3 patients, while recurrence was found in 2 cases out of 41, and 10 cases were not come in follow-up. **Table:2**.

**Table: 1: Basic characteristics of the patients
n=41**

Basic variables	Frequency/%
Age(mean+SD)	41.43+4.04 years
Duration of illness <1year >1years	25(60.97%) 16(39.02%)
SITE Right Left	27(65.85%) 15(34.15%)

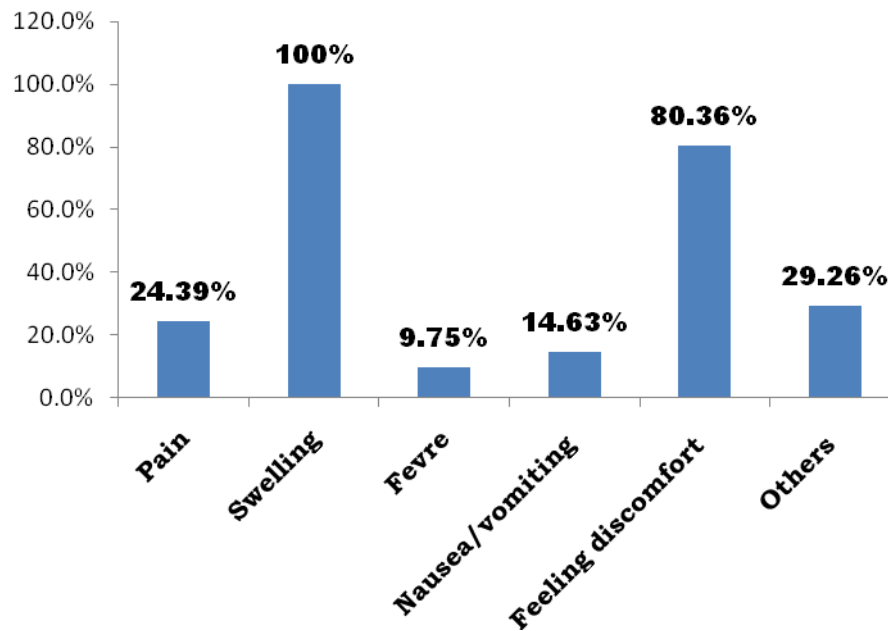


Fig: 1.Clinical characteristics n= 41

Table 2: Postoperative complicationsn=41

Complications	Frequency(%)
Pain	04(09.75%)
Haematoma	02(04.87%)
Infection	03(07.31%)
Recurrences	02(04.87%)
Edema	04(09.75%)
Feeling heaviness	03(07.31%)
Not in follow-up	10(24.39%)

DISCUSSION:

Hydrocele is the common surgical event in adult population. In this study 41 cases were treated surgically, to see the postoperative complications and recurrences rate in patients those were under went hydrocele surgery. We select surgical procedures according to the age disease condition and its severity, not a particular technique has been carried out. In mean age of the patients was 41.43+4.04 years. Similarly in the study of Latif U et al [13] reported age range between 15-75 years. On other hand **Jat N** et al [14] found comparable findings as hydrocele is common in 30-40 years age group. In this study right was more involved in 65.85% patients as compare to left side 34.15%. in favor of our study Latif U et al¹³ stated that hydrocele mostly present on right side in 56% cases, 42% patients had left side hydrocele and 2 cases had bilateral, while in our series no any cases was found with bilateral hydrocele.

In this study according to the clinical characteristics swelling was in all cases, feeling discomfort found in 80% of the cases, following by pain, nausea and vomiting were found with percentage of 14.63% and 9.75% respectively. Similar finding were reported in some previous studies as clinical appearance of a painful scrotal mass [15], In another study showed that common presenting feature was scrotal swelling, and in some patients found presentation of discomfort [16]. On other hand Jamaluddin MU et al [17] also found some comparable clinical presentations.

In our study very low rate was found of postoperative complications as; pain was in 09.75% patients, haematoma in 2 cases, edema was found in 3 patients, while recurrences were found in 2 cases out of 41, and 10 cases were not come in follow-up. Jamaluddin MU et al [17] reported that post-operative complications very minimal as 18% hematoma and 04% cases had developed wound infection and no recurrence had found, these finding are some different from our study as well as in our study haematoma prevalence in very low and

recurrences in 2 cases. **Jat Net** al [14] reported that post-operative recovery was good nosevere morbidity, wound infection and recurrence found in Hydrocelectomy

Supra Public and aspiration techniques. While haematoma was in 9 cases out of all, further he reported that commonest complication was wound infection 42.8% and 10% in the Jaboulay's and Lord's respectively. This little difference between these studies may due to our study contain small sample size and treatment techniques were used according to disease condition and severity, no any particular techniques has been carried out.

CONCLUSION:

In present study it is concluded that postoperative complications and recurrences rate of hydrocele was very low as compare literature. Surgical techniques should be applied according disease condition and its severity, our study was contain small sample size, more big sample size studies are needed in future.

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