Reasons behind Delayed Orchidopexy at Our Tertiary Centre

Dr. Sunil Kumar Mehra*, Dr. Dinesh Kumar Barolia, Dr. Arun Kumar Gupta, Dr. Vinita Chaturvedi

Department of Pediatric Surgery, J. K. Lon Hospital, S.M.S.Medical College, Jaipur, Rajasthan, India

Abstract

This study was conducted in children of undescended testes at tertiary centre. Purpose of this study was to evaluate the reasons behind delayed orchidopexy at our tertiary centre. This study was conducted in 300 male children of undescended testes, which were operated at our centre.

Keywords: - Cryptorchidism, Orchidopexy, Tertiary Centre, Testes, Undescended Testes.

Introduction

Undescended testes is a common entity in children. Undescended testis is defined as failure of one or both testes to descend into the scrotum at birth. It is more common in preterm baby, low-birth weight, and twin infants. Undescended testes can be found as associated symptoms like in congenital, chromosomal, or inter gender disorders.[1] The incidence of undescended testes in premature children is 33% . in full-term children is 3-5% and at the age of one year it comes down to 0.8- 1%. [2] Early treatment of undescended testes causes proper growth of testes reduces the chances of testicular malignancy. To get the higher most fertility potential in undescended testes, the recommended age of orchidopexy is soon after 6 month of age. [3]

Material and Method

This study was done in 300 male children of undescended testes at our tertiary centre. This retrospective study included the children who underwent orchidopexy by either laparoscopic or inguinal approach during December 2015 to December 2017. The purpose of study is to find out the reasons behind delayed orchidopexy in children of undescended testes, at our tertiary centre. We analyzed the number of children age wise that underwent for orchidopexy.

Results

Out of 300 orchidopexy there were 160 right sided and 140 left sided orchidopexy. We observed that 15 patients (5%) operated before one year of age, 49 patients (16.33%) operated between 1 and 2 year of age, and 236 patients operated after the age of 2 years. Most of the patients operated between the age of 5 and 10 years.

Table 1: Age wise distribution of number of orchidopexy

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of orchidopexy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 month to ≤12 month</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>&gt;12 month to ≤2 year</td>
<td>49</td>
<td>16.33</td>
</tr>
<tr>
<td>&gt;2 year to ≤5 year</td>
<td>87</td>
<td>29</td>
</tr>
<tr>
<td>&gt;5 year to ≤ 10 year</td>
<td>104</td>
<td>34.66</td>
</tr>
<tr>
<td>&gt;10 year</td>
<td>45</td>
<td>15</td>
</tr>
</tbody>
</table>

Discussion

Cryptorchidism is an entity in which absence of one or both testicles from the scrotum. Undescended testes are the most common congenital anomaly of the male genitalia. [4] There are various causes of undescended, like low birth weight of baby, small for gestational age, preterm delivery and mother took estrogen during the pregnancy. [5] Normal position of testes is in scrotum. Temperature of scrotum is comparatively low than abdomen. This low temperature initiates hormone mediated maturation of gonocyte to spermatogonia. Later on spermatogonia mature in spermatocytes. Thus untreated or delayed treated cases of undescended testes will lead to infertility and testicular malignancy. [6] Raghavendran et al showed most common cause delayed orchidopexy due to delayed presentation and careful of screening by physician. [7] Our study also revealed that delayed referral by physician is most common cause of late orchidopexy followed by lack of awareness of parents.

Conclusion

Our study emphasized the reason for delayed orchidopexy at our center are - (1) failure to diagnosed undescended testes at birth by pediatrician, (2) lack of parental awareness about the timing and outcomes of delayed orchidopexy, (3) delayed referral by pediatrician/physician, (4) associated serious medical condition precluding diagnosis of undescended testes. The conclusion is that the health care providers at periphery, parents and community, who were dealing with children, should be aware about the timing of orchidopexy and the complication resulting from delayed orchidopexy.

Table 2: Reasons behind delayed orchidopexy

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Number of patient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undiagnosed at birth</td>
<td>22</td>
<td>9.30</td>
</tr>
<tr>
<td>Lack of parental awareness</td>
<td>96</td>
<td>40.67</td>
</tr>
<tr>
<td>Delayed referral</td>
<td>99</td>
<td>41.94</td>
</tr>
<tr>
<td>Associated Medical condition</td>
<td>19</td>
<td>8.05</td>
</tr>
</tbody>
</table>
References


*Corresponding author:

Dr. Sunil Kumar Mehra
Department of Pediatric Surgery, J. K. Lon Hospital,
S.M.S.Medical College, Jaipur, Rajasthan, India
Email: drsunilsnmc2001@gmail.com