

Original Research Article


A study of pediatric gynecological problems in a tertiary hospital

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Abstract

Introduction: Gynecological disorders of children are rare. The investigations and treatment are also difficult and need expertise. Gynecologists should undergo training and also be able to diagnose and treat pediatric gynecological problems.

Aim: This study was mainly aimed at the problems presenting at pediatric age group that will interest the practicing Gynecologist in planning and management of problems. Some of them require further follow up to their adolescence and child bearing period also.

Materials and methods: 50 cases with gynecological problems up to the age of 12 years attending the government general hospital, Guntur were studied.

Results: 96% of cases belonged to low socio-economic group. 42% were from urban areas 58% were from rural areas. Their educational status was very poor. Only 20% are attending the primary school. 30% never attended the school. Rest was drop outs before primary school. In this series, the incidence of labial –vulvar agglutination was 10%.

Conclusion: The Gynecologist should be able to diagnose and treat pediatric gynecological problems. As the examination and investigations are difficult in children and needs expertise, the gynecologists should undergo training.

Key words

Pediatric, Gynecological problems, Vulvovaginitis, Puberty Menorrhagia, Ambiguous Genitalia, Sexual abuse.

Introduction

Gynecological Disorders during childhood are gaining increasing attention all over the world. In 1950, the first pediatric and adolescent gynecological clinic was started at the Chicago children's memorial hospital.

Gynecological disorders which affect children are not similar to those that affect the adult. Knowledge of some of these conditions and an approach to management are, therefore, important for the gynecologist. Pediatric gynecology is a subspecialised area of gynecology which has not received its due attention. It is only for the last two decades that the concept of having separate clinics has emerged. A pediatric patient undergoing her first gynecological examination should be treated with particular care. A gentle caring attitude enable the patient to relax at the time and during all future gynecological examinations [1-3].

Looking after problems related to reproductive tract will go a long way in improving the physical and reproductive health of girls and make motherhood safer for them. The objective is to study the pediatric gynecological problems of those attending by clinical examination, investigations and management by medical and / or surgical means at the Government General Hospital / Guntur College, Guntur.

The gynecological evaluation of the neonate should begin with a general examination noting any abnormal findings (webbed neck, abdominal mass) that suggest a genital anomaly. Each breast should be inspected. A Small amount of breast tissue is palpable in new born as a result of maternal estrogen exposure in utero. A small amount of discharge may also be expressed from the nipples. To visualize the external genitalia, the infant is placed in the supine position with the thighs flexed against the abdomen. The labia majora appear thick and bulbous. A white vaginal discharge is usually present. A small amount of withdrawal bleeding may also be observed during the first few days of life [4, 5].

Evaluation of bleeding in the neonate is not necessary unless it is excessive or persists beyond ten days of life. The clitoris often appears large in relation to the other genital structures. Clitoris is usually 2-4 mm wide. A clitoris wider than 10 mm is abnormal. Clitoral index (glans Length X width) may be calculated. A normal index is 6mm or less. Values above this require evaluation. The vaginal orifice may be difficult to visualize. To confirm patency, slight pressure may be applied to vestibule which will produce drops of mucus. A soft rubber catheter may also be used to locate the vaginal orifice. A recto abdominal examination should be performed with the little finger to evaluate uterus and ovaries and confirm patency of the ano-rectal canal. The internal genitalia are not palpable at birth. Occasionally, the cervix can be palpated in the midline. Prepubertal or adolescent child can be placed in frog leg position or knee chest position if sexual abuse is suspected. Otoscope, Cameron -Myer's vaginoscope, small Pedersen's specula and paediatric sized Huffman's speculum are appropriate for examination. Inspection of vulva is followed by palpation of Bartholin's and Skene's glands and a rectovaginal examination [6-9].

Aim of study

Though pediatric gynecological problems form a small segment, it is very important to understand and plan for a long term physical, social and psychological management. We happened to be associated with a Surgical Pediatrics department which is vibrant catering services to a large section of the people in the pediatric age group in coastal Andhra Pradesh. Hence the study was undertaken to highlight and project these problems.

Materials and methods

A total number of 50 cases presenting with gynecological problems were Studied. The study included all girls up to the age of Twelve years attending the Department of Gynecology and Obstetrics, Department of Pediatric Surgery and Department of Pediatrics. Information about

literacy and occupation of parents, place of residence (Urban or Rural) and socio-economic status were noted.

All girls had detailed history of the problem. In all patients' sibling history, mode of delivery, prenatal history and postnatal history were recorded. Nutritional status, immunization and mile stones of development were also noted. History of any medical disorders in the mother and any history of drug intake especially hormones were also elicited. Any history of consanguinity was recorded (**Photo – 1 to 6**).

Results

The present study revealed that 30% of cases belonged to 5-12 years of age group, 28% to 29 days -3 years of age group, 22% to 3-5 years of age group and 20% cases to be neonatal period (**Table – 1**).

Table – 1: Incidence according to age.

Age	No of cases	%
0-28 days	10	20
29 days to 3 years	14	28
3-5 years	11	22
5 years -12 years	15	30

In our entire study, the total number of anorectal malformation cases were 13 and 10% of these were having history of consanguinity in their parents. The total number of ambiguous genitalia cases were 4 and 5% of the cases were having history of consanguinity in their parents. Total cases of hydrometrocolpos and hematometrocolpos were 3 in number and there was no history of consanguinity in their parents. Twenty of the total fifty cases were found to have congenital abnormalities and this constitutes 40% of the cases. Out of these, three cases with their parents having history of consanguinity were noticed. This constitutes 15% (**Table – 2**).

In our study, we had 3 cases of labial synechia in the age group of 2-4 years, 5 cases of vulvovaginitis in the age group of 2-6 years, 1 case of perineal injury who was 6 years

old, 7 cases of sexual assault in the age group of 4-12 years, 6 cases of puberty menorrhagia in the age group 11-12 years, 2 cases of neonatal withdrawal bleeding in the age group of 4-10 days, 1 rare case of cyclical vaginal bleeding in a two year old baby, 4 cases with ambiguous genitalia in the age group of 4 days to 11/2 years of age, 1 case of Hydrometrocolpos who was 4 days old, 2 cases of hematometrocolpos in the age group of 12 years, 3 cases of pain abdomen in the age group of 5-9 years, 13 cases of anorectal malformations in the age group of 3 days to 2 years (**Table – 3**).

Table – 2: Incidence of consanguinity in cases with congenital abnormalities.

Cases	Cases	Cases with consanguinity	%
Anorectal malformations	13	2	10
Ambiguous genitalia	4	1	5
Hydrometrocolpos and Haematometrocolpos	3	Nil	Nil
Total	20	3	15

Table – 3: Incidence of age in various gynecological problems.

Cases	Age of presentation
Labial Synaechiae	2-4 Years
Vulvovaginitis	2-6 Years
Perineal injury	6 Years
Sexual Assault	4-12 Years
Puberty menorrhagia	11-12 Years
Neonatal withdrawal	4-10 days
A rare case of cyclical vaginal bleeding	2 years
Ambiguous genitalia	4 Days to 1 ½ Years
Hydrometrocolpos	4 days
Haematometrocolpos	12 Years
Ovarian Cyst/tumours	5-9 Years
Anorectal malformations	3 days to 2 years

In our study, we were able to manage 62% of cases by treatment in our center and partially manage 26% of the cases. We could not manage

the remaining 12% of cases and the cases were referred to higher center (**Table – 4**).

Table – 4: Incidence of possibility of managing the cases.

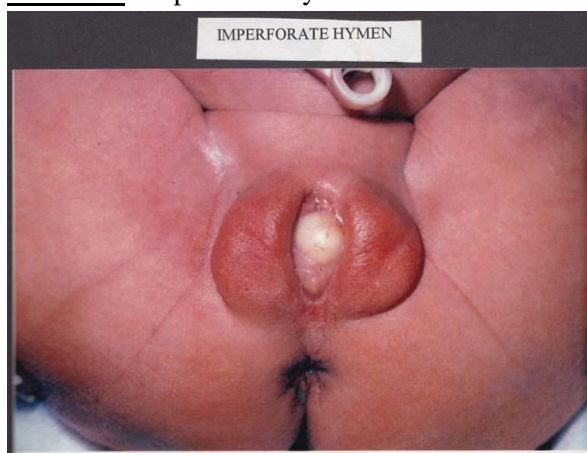
Cases	No of cases	%
Completely manageable	31	62
Partially manageable	13	26
Non manageable	6	12

Table – 5: Management of cases.

Type of management	No of cases	%
Medical	25	50
Surgical	19	38
Treatment not possible in our center	6	12

In our study of pediatric gynecological problems, 50% of cases were managed by medical means and 38% by surgical intervention. Treatment was not possible for the rest of the 12% in our center and these cases were referred to higher centers (**Table – 5**).

Photo – 1: Imperforate hymen.



Discussion

Although vulvovaginitis was the most common pediatric gynecological problems of childhood, in our study, we had only 10% incidence of vulvovaginitis. This may be due to the fact that ours is a referral hospital and the gynecologists outside the institute might have treated most of the vulvovaginitis cases [10, 11].

Photo – 2: Anovestibular fistula.

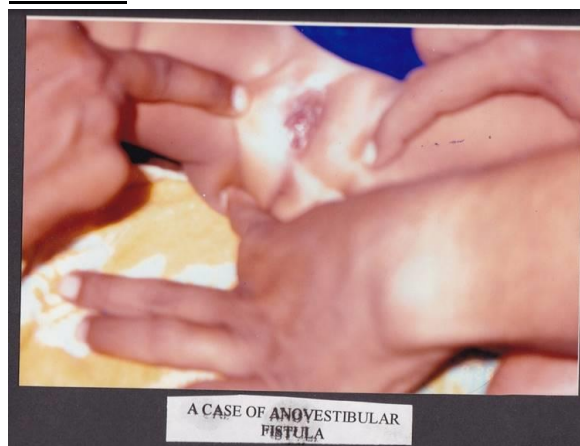


Photo – 3: Adrenogenital syndrome.

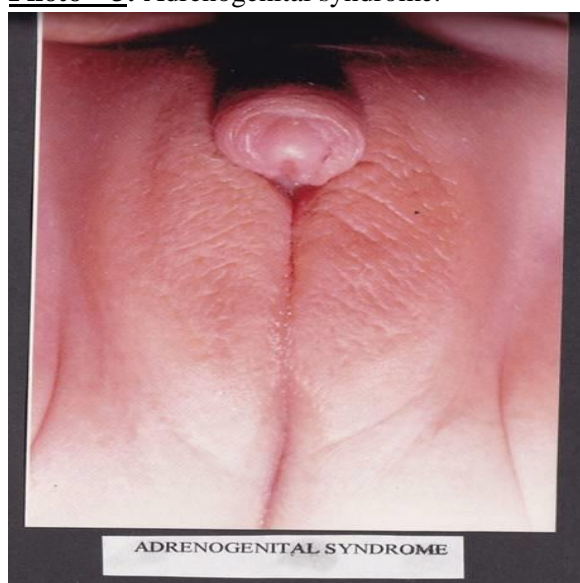


Photo – 4: Complete labial fusion.



Photo – 5: Labial vulvar agglutination.



In our study, we had 12% incidence of puberty menorrhagia. These patients were treated with hematinics, hormones and blood transfusions when required. Other medical disorders were evaluated. There was only one case of puberty menorrhagia with associated hypothyroid state.

We had two cases of neonatal withdrawal bleeding. The mothers of these babies were given reassurance that it is a normal phenomenon.

We had a two year old baby presenting with cyclical withdrawal bleeding since 3 months. Ultrasonographic study of abdomen and pelvis was normal. Examination under anaesthesia was undertaken. This case was referred to higher centres for follow up.

In our study, we had 8% incidence of patients with ambiguous genitalia. They were advised investigations and follow up for evaluation.

Photo – 6: True hermaphroditism.



In our study, we had one case of hydrometrocolpos and two cases of hematometra and hematocolpos. These were treated surgically and advised regular follow up.

In our study, we had three cases of pain abdomen. In one case, laparotomy was done for suspected ovarian cyst. The cyst was found to be a mesenteric cyst and was excised. In another case laparotomy was undertaken for suspected twisted right ovarian cyst. Tubo-ovarian mass excised showed histopathological report as choriocarcinoma. This patient died on fifth post-operative day.

In our study, we had 14% incidence of sexual abuse .There should be better parent child relationship. The girl babies should be grown carefully because close relatives or persons known to them did most of the sexual abuse. Knowledge should be imparted to the mother and to the child. The girl babies should not be left alone at home.

In our series, we had one case with injury to the external genitalia due to accidental trauma. This was treated immediately and recovery was uneventful.

In our study, we had 26% incidence of Anorectal malformations. Because our hospital is a tertiary

hospital, most of the cases were referred from rural areas and this could be the reason for the higher percentage of anorectal anomalies in our study. For all cases, surgical correction was offered.

It was observed that our patients are mentally unprepared for menstruation. The first reaction when these girls had attained menarche was fear. This probably stems from lack of knowledge about physiology of menarche and menstruation. They should be explained about the importance of genital hygiene. Knowledge should be imparted to the mothers of these children about genital hygiene and the physiology of normal menstruation. For this, they need a minimum education [12-14].

Conclusion

More studies are needed to find out the incidence of various gynecological, medical and social problems.

The gynecologist should be able to diagnose and treat pediatric gynecological problems. As the examination and investigations are difficult in children and needs expertise, the gynecologist should undergo training.

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