

## Genital Lesions in Children – A Study at Tertiary Care Centre

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### Abstract

#### INTRODUCTION

Neonate to adolescent age children develop different genital dermatoses, sometimes STI may be seen in them which may be symptomatic or asymptomatic

#### BACKGROUND AND AIMS

Genital lesions in children create anxiety most often in parents and dilemma in treating physician sometimes. STI or non-STI dilemma or to treat or observe conflict usually encountered. Awareness, managing such cases in the past help the physician to treat them in the right path. The present study (4 years) was taken up to know different types of genital lesions and their occurrence according to age group.

#### RESULTS

In 4 years study, out of 2,13,835 patients of DVL OPD, 16,627 were male children, 14,790 were female children below 15 years. 426 male children and 431 female children had genital lesions, mean age was 9.2 for male children, 8.6 for female children, dermatoses predominant in both sexes, predominant STI, genital warts were seen in both sexes. Balano-posthitis was common in male children and vulvo-vaginitis was common in female children.

#### CONCLUSION

Knowledge and practical experience in genital lesions of children will help in preventing complications and prevention of infections

#### KEYWORDS: GENITAL DERMATOSES CHILDREN STI CHILD ABUSE

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### I. Introduction

Neonate stage to adolescent age, children develop genital lesions which may be dermatoses or STI (infections) associated with morbidity or drug reactions sometimes. These arouse anxiety in parents, so children are brought to different health care settings. Specialist can differentiate but family physicians will have a task at hand to manage them. These may differ in prevalence from developed countries to developing countries. These lesions can be early manifestation of some serious symptomatic problems like SSSS or drug reactions or it may be simple physiological conditions which need reassurance. When STI is a possibility should exclude child abuse (sexual) as cause and relevant history from parents and attendants taken, necessary management should be undertaken as per NACO protocol.

### II. Background

Genital lesions always create conflict in mind hence may be shrouded in secrecy, presentation may be delayed. The causes can be many and difficult to differentiate by family physicians and general practitioners, hence accurate diagnosis and specific treatment may be a challenging task. STI or non-STI dilemma may compound the issue. These may change from area to area and in developed and developing countries in their occurrence. Seasonal variation may be present. In this background the present study was taken up in a tertiary care centre of Andhra Pradesh, India.

### III. Aims

1. To know the different genital lesions in children below 15 years at different age groups
2. To know which lesions are more common in which age group

#### IV. Methodology

This is a prospective observational study done in dept. of DVL, Govt. General Hospital/ Kurnool Medical college for 4 years -2015,2016,2017 and 2018 (Jan to Dec) All the children below 15years with genital symptoms attending DVL OPD in were examined for any genital lesions.History was taken from their parents /attendants and from patients also (in above 5 years age group). Institutional ethical committee clearance taken.Informed consent was taken from parents/ attendants.The relevant bedside and lab investigations were done. Epidemiological data was recorded. Results were analysed.

#### V. Results – Tables

##### YEAR WISE SEX WISE GENITAL LESIONS -STATISTICS

YEAR (JAN TO DEC)	TOTAL DVL OPD STATISTICS (NEW CASES)	TOTAL MALE CHILDREN SEEN (NEW CASES)	MALE CHILDREN HAVING GENITAL LESIONS (NEW CASES)	FEMALE CHILDREN (NEW CASES)	FEMALE CHILDREN HAVING GENITAL LESIONS
2015	45367	3445	86	3106	75
2016	52170	4436	105	3931	103
2017	58344	4224	116	3903	116
2018	57954	4522	119	3850	137
TOTAL	213835	16627	426	14790	431

##### AGE WISE SEX WISE YEARLY STATISTICS OF CHILDREN HAVING GENITAL LESIONS

AGE GROUP	2015		2016		2017		2018	
	MALE CHILDRE N	FEMALE CHILDRE N	MALE CHILDRE N	FEMALE CHILDRE N	MALE CHILDR EN	FEMALE CHILDRE N	MALE CHILDRE N	FEMALE CHILDRE N
NEONATES (14+22)	01	01	04	07	04	06	05	08
INFANTS (67+59)	14	10	16	15	18	18	19	16
TODDLER (2-5 YEARS) (99+100)	18	19	24	23	29	27	28	31
PRE PUBESCENT (6-10 YEARS) (99+85)	21	16	25	23	27	22	26	24
ADOLESCENT (11-15 YEARS) (147+165)	32	29	36	35	38	43	41	58
TOTAL (426+431)	86	75	105	103	116	116	119	137

##### DISEASE WISE 2015 TO 2018 (4 YEARS) STATISTICS

	NEONATES (<4WEEKS)		INFANTS (BELOW 1 YEAR)		TODDLERS (2-5 YEARS)		PRE PUBESCENT (6-10 YEARS)		ADOLESCENT (11-15 YEARS)	
	MC	FC	MC	FC	MC	FC	MC	FC	MC	FC
DIAPER DERMATITIS	06	05	20	09	18	14	-	-	-	-
GENITAL SEBORRHEIC DERMATITIS	04	03	12	08	11	-	-	-	16	04
CONTACT DERMATITIS	-	04	-	06	-	06	-	12	17	22
GENITAL LESIONS OF PSORIASIS	-	-	-	-	04	01	02	-	06	02
GENITAL CANDIDIASIS	-	01	02	05	04	03	02	03	04	17
GENITAL LICHEN PLANUS LESIONS	-	-	-	-	-	-	01	01	08	02
GENITAL / ANAL WARTS	-	-	01	01	02	-	02	-	05	01
GENITAL MOLLUSCUM	-	-	-	-	-	-	-	-	02	01
GENITAL SCABIES	02	-	06	-	06	01	12	01	15	02
HAEMANGIOMA	-	01	-	01	-	01	-	-	-	-
GENITAL LSA	-	-	-	01	-	04	02	08	04	16
GENITAL VITILIGO	-	02	02	03	03	04	02	02	01	03
GENITAL HERPES	-	-	-	-	-	-	-	01	01	02
LYMPHANGIOMA	-	-	-	-	01	-	01	01	-	01
PRIMARY CHANCRE	-	-	-	-	-	-	-	-	01	-
LICHEN SIMPLEX	-	-	-	-	-	-	01	-	03	01
PHIMOSIS	-	-	01	-	04	-	05	-	03	-

PARA PHIMOSIS	-	-	-	-	-	-	-	-	02	-
VULVAL OEDEMA	-	01	-	-	-	01	-	01	-	02
CONDYLOMATA LATA	-	-	-	01	-	-	-	01	01	01
VULVO-VAGINITIS ( OTHER THAN VVC)	-	02	-	06	-	21	-	25	-	38
BEHCET'S DISEASE	-	-	-	-	-	-	-	-	02	-
KAWASAKI'S DISEASE	-	-	02	03	06	14	-	-	-	-
GENITAL LESIONS OF PEMPHIGUS	-	-	-	-	-	-	-	01	-	01
LIPSCHUTZ'S ULCERS	-	-	-	-	-	04	-	08	-	18
BALANOPSTHITIS	-	-	12	-	16	-	31	-	12	-
INSECT BITE REACTION	02	03	02	03	05	08	12	05	11	08
FDE	-	-	-	-	01	02	08	06	12	09
S J SYNDROME	-	-	-	-	-	-	01	02	03	05
TEN	-	-	-	-	-	-	-	-	-	01
LYMPHODEMA OF GENITALIA	-	-	-	-	04	02	06	03	05	08
GENITAL HANSEN'S DISEASE	-	-	-	-	-	-	01	-	01	-
ACRODERMATITIS ENTEROPATHICA	-	-	03	06	02	08	-	-	-	-
HAND FOOT MOUTH DISEASE	-	-	04	06	11	06	-	-	-	-
PORO KERATOSIS ON GENITALIA	-	-	-	-	-	-	01	02	-	-
DAPSONE SYNDROME	-	-	-	-	-	-	03	02	-	-
ZIP STRAP INJURY	-	-	-	-	01	-	06	-	12	-
TOTAL	14	22	67	59	99	100	99	85	147	165

IMAGES



VULVOVAGINAL CANDIDIASIS



GENITAL EDEMA



BEHCET'S DISEASE





**GENITAL VITILIGO**



**ECZEMA FOLLOWING  
CIRCUMCISION**



**ERYTHRODERMA  
FOLLOWING CANDIDIASIS**



**CANDIDIASIS**



**PARAPHIMOSIS**

## **VI. Discussion**

Genital lesions vary in their presentation and in its aetiology depending upon the age and location in children. In neonates, genital lesions most often may be due to genetic diseases, infections due to vertical transmission or transmitted due to birth canal infections at normal delivery or due to contact irritants from diaper or other clothing used or material used for toilet cleaning. Our study showed diaper dermatitis in 30% cases in comparison with Naresh Jain et al. Among infants in our study one case of congenital syphilis was seen with genital lesions, which is rarely seen now. Commonly among infants, diaper dermatitis in 23%, seborrheic dermatitis in 16% cases seen in our study. This is in comparison with Thapa DM et al

There were some cases of genital candidiasis, contact dermatitis, genital vitiligo, acrodermatitis enteropathica (genital lesions) and genital scabies in the infants group studied.

16% of toddlers had diaper dermatitis, other predominant causes were balanoposthitis in male children and vulvo-vaginitis in female children which was compared to Naresh Jain et al, Reddy VS et al. Kawasaki disease was seen in 12% of toddlers. One male child and female child had genital and perianal warts in this group.

Among pre-pubescent boys, balanoposthitis, genital scabies, insect bite reaction, contact dermatitis, drug reactions were mainly seen. Among pre-pubescent girls vulvo-vaginitis was common followed by lichen sclerosus et atrophicus similar to study by Jawade SA et al and Golfy Jose et al.

Among boys of 11-15 years group balanoposthitis was predominant followed by drug reactions, zip strap injuries, genital scabies and genital lymphoedema. One boy had biopsy proven Hansen's patch on the penile region. One boy showed Behcet's disease in this group. Two boys had perianal warts who admitted to homosexual contact. Among girls of this age group, vulvo-vaginitis was most commonly seen followed by contact dermatitis, nonspecific painful genital ulcers. One girl had genital and perianal wart with candidiasis, sexual abuse suspected, details not given by parents or the child.

## **VII. Conclusion**

Among Infants and Toddlers, inflammatory disorders were predominantly seen whereas in Pre-pubescent and Adolescents children inflammatory disorders and infections and infestations were equally seen in this study. As most of these problems are associated with morbidity, initiating treatment at early stage will prevent complications and control infections.

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