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SPECTRUM OF PEDIATRIC PLASTIC SURGERY IN A SUPERSPECIALITY PEDIATRIC HOSPITAL - FIRST OF ITS KIND TERTIARY CARE CENTRE IN INDIA

Plastic Surgery

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ABSTRACT

Our hospital is the first government hospital in India, which provides treatment to pediatric population up to 18 years of age only, with a dedicated department of Pediatric plastic surgery. This study is our experience of plastic surgery for pediatric age group in the first public sector pediatric superspeciality hospital in India. This was a retrospective study done by Department of Pediatric plastic surgery in Super Speciality Pediatric Hospital & Post Graduate Teaching Institute Noida Uttar Pradesh over one year from December 2016 to December 2017. All cases that were operated in the major operation theater were included. One hundred and seven cases were operated. Majority of our cases were trauma related (35.51%) followed by those with congenital deformity (28.97%). We recommend the establishment of more such pediatric hospitals, with dedicated department of pediatric plastic surgery for better outcomes and care of pediatric patients.

KEYWORDS

Pediatric superspeciality hospital, Pediatric plastic surgery, trauma, congenital deformity

Introduction-

Department of Pediatric plastic and reconstructive surgery focuses on the management of pediatric physical deformities. These deformities may be congenital, due to trauma, or manifest due to acquired diseases. In India there is no separate unit of Pediatric plastic surgery other than Department of plastic and reconstructive surgery in government hospitals. Hence all such cases whether pediatric or adult are operated by the same plastic surgeon. Our hospital is the first government hospital in India which provides treatment only to pediatric population up to 18 years of age and has department of Pediatric plastic surgery. This study is our experience of pediatric plastic surgery in the first government superspeciality pediatric hospital in India.

Material & method-

This study was done retrospectively in Department of Pediatric plastic surgery in Super Speciality Pediatric Hospital & Post Graduate Teaching Institute Noida UP for the duration of one year from December 2016 to December 2017. All cases that were operated in the major operation theater were included in the study. All trauma related cases with head injury and craniofacial deformities were referred to other tertiary centers due to lack of neurosurgical support, at present, in our hospital. All acute burn cases that required admission were referred to specialized burn units due to unavailability of burn ICU in our hospital. Hence such cases were excluded from the study.

Results-

Table-(1) shows age and gender wise distribution of patients in our study. Out of 107 patients 63 were males and 44 were females. Most patients (83 patients) were below 10 years of age. Figure (a) illustrates distribution of case according to etiology. Trauma cases were maximum (35.51%) followed by those with congenital deformities (28.97%). Table (2) illustrates distribution of cases according to diagnosis.

Table 1: Age and gender wise distribution of patients

Age in years	Male	Female	Total
0-5	37	23	60
6-10	13	10	23
11-15	6	8	14
16-18	7	3	10
Total	63	44	107

Figure a: Distribution of cases according to etiology

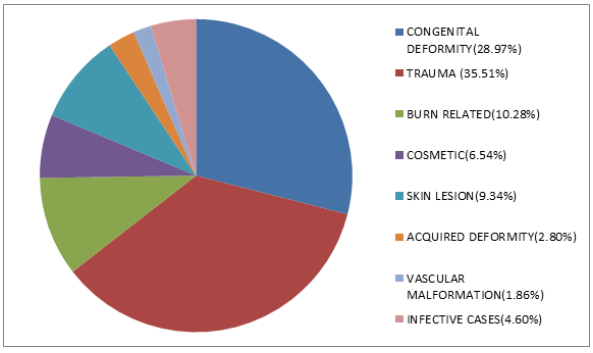

Table 2: Distribution of cases according to diagnosis

Etiology	Diagnosis		No.	Total
Congenital	Congenital Hand	Syndactly	5	31
		Polydactly	2	
		Acrosyndactly	1	
	Congenital Foot		2	
	Cleft Lip With Palate	Unilateral Lip	2	
		Bilateral Lip	1	
		Unilateral Lip+Palate	2	
		Bilateral Lip+Palate	2	
		Only Palate	8	
	Secondary Deformity Cleft Lip		1	
	Hypospadias	Distal Penile	3	
	Ear Deformity		1	
	Nasal Deformity		1	
Cosmetic	Scar		7	7
Trauma	Face	Lacerated Wound	20	38
		Fracture	1	
	Lower Limb	Lacerated Wound	2	
		Defect Requiring Skin Grafting/Flap	8	
	Upper Limb	Lacerated Wound	2	
		Crush Injury Finger	5	
Burn Related	Contracture Hand		10	11

	Contracture Breast		1	
Acquired Deformity	Ear		1	3
	Nose		1	
	TMJ Ankylosis		1	
Vascular Malformation			2	2
Lesions	Naevus		2	10
	Dermoid		4	
	Sebaceous Cyst		1	
	Lipoma		2	
	Ganglion		1	
Infective Related	Raw Area		3	5
	Abscess Hand		1	
	Gangrenous Digit/Hand		2	
Total				107

DISCUSSION-

In this study 107 patients were operated in which 58.87% were males and 41.13% were females. It was observed that 77.57% of our patients were below 10 year of age and only 22.43% were above 10 years. This may be because, in India pediatric age is considered up to 12 or 14 years and low awareness in the catchment area, that our institute admits patients up to 18 years of age.

Majority of our cases were trauma related (35.51%) followed by those with congenital deformity (28.97%). Burn deformity constitutes 10.28% of total cases. Most common site of trauma was face followed by those on the lower limb. All cases of facial trauma were clean lacerated wounds having common history of fall except one case of nasal bone fracture who had history of alleged bluntfist injury. Lower limb trauma was primarily due to bicycle accidents, next major cause was motorbike accidents. Most patients of hand trauma had history of entrapment of digit in door or window.

In our study we found 52.63% of trauma cases were associated with history of fall in home or outside the home followed by trauma related to road traffic accident (RTA) which constitutes 26.31%.Our results were similar to Study of Sharma et al[1]which also revealed that history of fall was the commonest cause of trauma,next was RTA. A recent study of Kundalet al[2] found 52.61% of patients presented with RTA followed by patients having history of fall (36.32%). All trauma cases associated with head injury were referred to other tertiary hospital because of lack of neurosurgery department in our hospital. This is probably the reason that our results do not match kundalet al[2]study findings.

Among congenital cases most common were cleft lip and palate (51.61%) followed by congenital hand (25.80%). In our study we found syndactly cases were more than polydactyly cases. Scald was the most common cause in burn related deformities.

CONCLUSION -

We recommend the setting up of more such dedicated department of pediatric plastic surgery in public sector hospitals for better care of pediatric patients.

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