Trends of Childhood Vasculitides in Eastern India

A prospective follow up for 7 years (2004-2010) revealed 10.2% children (*n*=158) had vasculitis among all rheumatological cases (*n*=1544). Henoch-Schonlein Purpura (HSP) (56.9%) and Kawasaki disease (KD) (24%) were major groups.

Key words: Childhood vasculitides, India.

We, at our pediatric rheumatology clinic, IPGMER, Kolkata, diagnosed and prospectively followed up children with different types of vasculitis for a period of 7 years from 2004 to 2010. The objective was to delineate the clinical spectrum of childhood vasculitis from Eastern India and to explore the differences in disease pattern from that already reported. Out of total 1544 rheumatological cases under12 years, 158 children had some form of vasculitis according to American College of Rheumatology (ACR) and Chappell Hill Consensus Criteria (CHCC). Nineteen cases were lost to follow-up. Admission was required for 106 patients and 54 had serious illness. Nine patients died. Primary vasculitides were diagnosed in 135 patients. Male: female ratio was 1.9:1 and the mean age of onset was 5.5 years. Kawasaki disease and Henoch-schonlein purpura was diagnosed in 38 (24%) and 90 (56.9%) cases, respectively. Other vasculitides included Polyarteritis nodosa (n=4), Wegener's granulomatosis (n=2), and Takayasu disease (n=1). Secondary vasculitis accounted for 23 cases. HSP remains the most frequent vasculitis in our study, as also seen in other studies [1,2] Sixteen of them (18%) had major organ involvement and 7 (7.77%) had gastro-intestinal affection. Nine patients had isolated renal involvement. Among the 38 cases of KD, 20 had coronary artery involvement, 5 had persistent aneurysms, 29 received IVIG, none required angioplasty, and the mortality was nil. One had incomplete KD, and atypical presentation with renal failure was found in one.

Large studies with uniform comprehensive data are not available from Asia. Indian data that included adult

population is not a true representation of pediatric vasculitides from all over the country [4]. Our report is an attempt to document etiology of vasculitides in Eastern part of India.

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SUMANTRA SARKAR, RAKESH MONDAL, MADHUMITA Nandi and Alakendu Ghosh*

Pediatric Rheumatology Clinic, Departments of Pediatrics and *Medicine, Institute of Post Graduate Medical Education and Research, Kolkata, India. sumantra.com@gmail.com

References

- 1. Bowers S, Roettcher P; Pediatric rheumatology clinic population in the United States: results of a three year survey. J Rheumatol. 1996;23;1968-74.
- Dolezalova P, Telekesova P, Nemcova D, Hoza J. Incidence of vasculitis in Children in the Czech Republic:2-year prospective epidemiology survey. J Rheumatol. 2004 ;31:2295-9.
- 3. Kumar L, Singh S. Vasculitis in children. Indian J Pediatr. 1996;63:323-34.
- 4. Joshi VR, Mittal G. Vasculitis Indian perspective. JAPI. 2006;54;12-4.

Vasculitis Types	Czeck series [4] (<i>n</i> =452) cases (%)	Canadian series [2] (n=225) cases (%)	US series [3] (n=434) cases (%)	Indian data [9] (<i>n</i> =1064) cases (%)	Present series (n=158) cases (%)
KD	23 (5.08)	147 (65.3)	97 (22.4)	5 (0.46)	38 (24.0)
HSP	410 (89.51)	38 (16.9)	213 (49.1)	232 (21.8)	90 (56.9)
WG	1 (.002)	5 (2.2)	6(1.4)	147 (13.8)	2(1.26)
PAN	1 (.002)	4 (1.8)	14 (3.2)	94 (8.8)	4 (2.53)
TD	1 (.002)	2 (0.9)	8(1.8)	215 (20.2)	1 (0.63)
Behcet's	_	2 (0.9)	_	145 (13.6)	_
Miscl	16 (3.53)	27 (12)	96 (22.1)	226 (10.36)	23 (14.55)

TABLE I Spectrum of Vasculitis – Comparative Data in Different Series

KD: Kawasaki disease; HSP: Henoch-Schonlein purpiura; WG-Werner's granulomatosis: PAN-Polyarteritis nodosa; TD-Takayasu disease.

INDIAN PEDIATRICS