Correspondence

Henoch-Schonlein purpura in children. *Influence of age on the incidence of nephritis and arthritis*

To the Editor

I have read with interest the study in Henoch-Schonlein Purpura (HSP) in Children by Hamdan JM and Barqawi MA.[1] I have some comments and queries, which require clarification from the authors.

The incidence and prevalence of HSP were probably underestimated as most cases were not reported to public health agencies, although HSP accounted for 1% of hospital admissions in the past. Changes in medical practice have reduced the frequency of admissions by 0.06% of admissions for HSP at one large Midwestern pediatric center in the United States.[2] The most serious sequelae of HSP is renal involvement. This complication occurs in 50% of older children, and in only 25% of children younger than 2 years. Less than 1% of cases progress to end-stage renal disease. Patients who develop renal involvement generally do so within 3 months of the onset of rash. The most common manifestation of renal disease is hematuria. Apparently, development of bloody stools with HSP is also a risk factor for renal disease. Renal disease due to HSP is one of the common causes of secondary hypertension in the pediatric population.

Nephritis was noticed in 20 (29%) patients out of 68 patients in the recent study by Hamdan and Barqawi.[1] How many of these patients had hypertension, and for how long were the nephritis patients followed? There are variations in different studies. Those patients of HSP who have nephritis microscopic hematuria may persist for years. Progressive renal failure occurs in less than 5% of patients with HSP.[3] Although HSP is a self limiting disease, complete resolution is the norm, however, persistent proteinuria imparts the worst outlook. Almost 1-5% of these children progress to end stage renal disease, and long term follow up is required.[4] Tizard[5] reports that renal involvement in studies from the Middle East had shown similar patterns to that reported elsewhere, however, at a lower percentage which ranges from 17-24%. Involvement of other systems in this disease reported from Middle East studies are the urologic manifestations including penile swelling, which was first reported from Qatar, then from Jordan, and Bahrain. One child from Qatar had stenosing ureteritis with resultant hydronephrosis and hypertension. Regarding pulmonary manifestations, one patient from Jordan had recurrent chest pain and gross hematuria that responded to a short course of steroids. Pulmonary hemorrhage was reported from Saudi Arabia.[6] Pleural hemorrhage, which has not been reported before, was reported from Qatar in a child with HSP. Calf muscle pain has been reported from Qatar in 12.5% of cases, and was symmetrical, as was mentioned in the literature.[7] Ocular involvement, which is rare, occurred as subperiosteal orbital hematomas in a report in various studies.[8,9]

Ghulam Nabi
Department of Pediatrics
Bughshan Hospital
PO Box 5860, Jeddah 21432
Kingdom of Saudi Arabia

Reply from the Author

We would like to thank Dr. Nabi for his comments. We limited our study only to the clinical profile and complications of Henoch-Schonlein purpura (HSP) during the acute phase of the disease. Other studies mentioned in Dr. Nabi's comments referred to acute and long term complications of HSP, on the incidence of nephritis which varied from 20-100% in these studies. It is worthy to mention that only one patient in our study developed severe hypertension, and needed antihypertensive therapy in order to control his blood pressure.

Jahed Hamdan
Mousa Barqawi
PO Box 3291, Um-Elsummaq,
Amman 11821, Jordan

References

1. Hamadan JM, Baraqawi MA. Henoch-Schonlein Purpura in children. Influence of age on the incidence of nephritis and arthritis. ***Saudi Med J*** 2008; 29: 549-552.
2. Miller ML, Pachman LM. Henoch Schonlien Purpura. In: Behrman K, Stanton J, editors. Nelson Text book of Pediatrics. 18 ed. Philadelphia (PA): Saunders Elsevier; 2008. p. 1043.
3. Ambruso DR, Hyast T, Lone PA, Nuss R. Henoch-Schonelin Purpura. In: Hay WW, Jr. Levin MJ. Sondheimer JM, Deterding RR. Lange Medical books. Current pediatric diagnosis and treatment, 17th ed. New York: McGraw-Hill; 2005. p. 897-898.
4. Coppo R, Andrulli S, Amore A, Gianoglio B, Conti G, Peruzzi L, et al. Predictors of outcome in Henoch-Schonlein Nephritis in children and adults. ***Am J Kidney Dis*** 2006; 47: 993-1003.
5. Tizard EJ. Henoch-Schonlein purpura. ***Arch Dis Child*** 1999; 80: 380-383.
6. Al Harbi NN. Henoch Schonlein purpura complicated with pulmonary hemorrhage but treated successfully. ***Pediatr Nephrol*** 2002; 17: 762-764.
7. Kamal A. Childhood Henoch Schonlein Purpura in Middle East Countries. ***Saudi J Kidney Dis Transpl*** 2007; 18: 151-158.
8. Maluf RN, Zein WM, El Dairi MA. Bilateral subperiosteal orbital hematomas and Henoch Schoenlein purpura. ***Arch Ophthalmol*** 2002; 120: 1398-1399.
9. Perveez VL, Chavala SH, Ahmed M, Chu D, Zafirakis P, Baltatzis S, et al. Ocular manifestations and concepts of systemic vasculitides. ***Surv Ophthalmol*** 2004; 49: 399-418.