Long-Term Morbidity Following IGA Vasculitis in Childhood

Nossent, J1,2, Raymond, W1, Ognjenovic, M1, Keen, H1,3, Preen, D4, and Inderjeeth, C1,2

1Rheumatology Section, Medical School, University Western Australia
2Sir Charles Gairdner Hospital, Perth, Australia
3Fiona Stanley Hospital, Perth, Australia
4School of Population and Global Health, University Western Australia

Background/Objective

Patients with IgA vasculitis (IgAV aka Henoch Schonlein) may require aggressive initial treatment, are prone to disease relapses and may have sustained abnormal IgA responsiveness. We investigated whether the relatively rare diagnosis of childhood IgAV is associated with subsequent comorbidity, hospitalisation and interventions.

Objectives and Approach

Using linked administrative health data from the Western Australian Rheumatic Disease Registry we performed an observational cohort study comparing hospitalisation and ED visit rates (per 1000 person years), comorbidity accrual (Charlson comorbidity index; CCI) and procedures between 494 IgAV patients < 20 years and 1385 matched controls over a twenty-year period.

Results

Hospitalisation was proportionally (73.5 vs 51.5%) and by rate (21.7 vs 18.9; rate ratio 1.15, p<0.01) increased in IgAV patients. IgAV patients more often underwent diagnostic and medical procedures than controls, who had higher rates of surgical interventions. ED visit frequency (25 vs 16%) and rate (10.8 vs 8.43, rate ratio 1.29, (p<0.01) was also increased in IgAV patients, who more often accrued peptic ulcer and renal disease than controls and had an increased accrual of CCI ≥3.

Conclusion / Implications

A diagnosis of IgAV in childhood significantly increases the risk and rate of subsequent hospital admission, ED visits and accrual of severe comorbidity. Although often considered a self-limiting disease, the occurrence of childhood IgAV signifies the presence of a sustained predisposition to illness, likely related to abnormal IgA functioning.