Immunological thrombocytopenia in children

In Journal no. 21/2010, Ghanima et al. (1) presented an excellent overview of immunological thrombocytopenia. The article concentrated mainly on the findings in adults. Immunological thrombocytopenia is also an important condition in children. We would like to focus on some specific aspects of clinical conditions in this age group.

The incidence in children under 15 years is higher than in adults and is 4–5/100 000. The age distribution has an obvious peak in the group 1–6 years, and it is these children who represent typical post-infectious immunological thrombocytopenia with a short «mild» course and few clinical problems (2). In older children and adolescents the clinical symptoms are more like those seen in adults, and the course more often becomes chronic. The most important factor predicting a chronic development is bleeding symptoms that have lasted for more than 14 days before the diagnosis is made (3).

The treatment guidelines for children emphasize that most patients will not need medication, almost regardless of the platelet count. The exceptions are serious haemorrhages and ongoing bleeding in the mucous membranes (4). When treatment is indicated, most authorities in Nordic countries regard intravenous immunoglobulin as the first choice. The advantage of this is more rapid increase in the platelet count, but, as pointed out by Ghanima et al., this treatment has considerable side-effects (1). Oral steroid therapy is a good alternative, but a bone marrow check is mandatory in children before starting steroids, as this treatment may mask acute leukaemia, which occurs in the same age group. Steroid treatment for more than 2–3 weeks is contraindicated because of the risk of inhibition of growth in children.

In chronic immunological thrombocytopenia (about 25 % have thrombocytopenia for more than six months), Rituximab is often tried before possibly deciding on splenectomy. Splenectomy has a success rate of about 80 % in children. It should usually not be carried out before some years’ observation, as spontaneous remission is not unusual, even after many years. The new thrombopoietin receptor agonists have not yet been approved for use in children, but the first study in children has shown promising results (5), and several studies are currently underway.

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References