

### Antiplatelet antibodies

Citation	LOE	Study design	Patient numbers	Summary
Yildirmak et al. <i>Acta Haematol</i> 2005;113:109–112	Ila	Study conducted to determine whether antiplatelet antibodies and platelet surface antigens differed in acute and chronic ITP	80	Platelet surface antigens were significantly decreased in both acute and chronic ITP when compared to control group (p=0.001)

### Special diagnostic considerations

Citation	LOE	Study design	Patient numbers	Summary
Imbach et al. <i>Pediatr Blood Cancer</i> 2006;46:351–356	IV	Determination of the cut-off point for diagnosis of chronic ITP using data collected by questionnaires to the physicians caring for children with ITP, at diagnosis, 6, and 12 months later		Primary measure: data were compared regarding initial features and follow-up with emphasis on children with persistent thrombocytopenia, and those with ITP who recovered their platelet counts between 7 and 12 months from diagnosis Primary outcome: a 12 months from diagnosis, 79 of 308 (25.6%) children recovered from ITP. Children with recovered ITP were younger than children with ongoing ITP (P=0.043) and exhibited a lower frequency of bleeding symptoms during the first 6 months after diagnosis (P=0.018). The high rate of recovery from ITP between 7 and 12 months demonstrates that the cut-off point of 6 months does not adequately differentiate chronic from acute ITP

### Reticulated platelets

Citation	LOE	Study design	Patient numbers	Summary
Saxon et al. <i>J Ped Hematol Oncol</i> 1998;20:44–48*	Iib	Study to assess the role of reticulated platelet (RP) counts in distinguishing ITP compared counts from 15 consecutive patients with ITP, with counts from 20 patients with acute lymphoblastic leukaemia (ALL), 10 with aplasia and 27 healthy	72	Primary measure: RP counts measured by whole-blood cytometric technique Primary outcome: patients with ITP had a mean (+/- 1 SD) RP level of 32.9 +/- 10.2%; patients with ALL, 6.6 +/- 3.1%; patients with aplasia, 3.4 +/- 2.0%; and healthy patients, 7.9 +/- 2.9%. RP

	children	counts significantly increased in children with ITP
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### *H. pylori*

Citation	LOE	Study design	Patient numbers	Summary
Takechi et al. <i>Ped Int</i> 2006;48:76–78	III	Case study of ITP patient infected with <i>H. pylori</i>	1	Omeprazole administration (20 mg once a day) resulted in transient elevation of platelet count, emphasising the relationship between <i>H. pylori</i> infection and thrombocytopenia
Hayashi et al. <i>Ped Int</i> 2005;47:292–295	III	Study examining association between <i>H. pylori</i> infection and cITP	10	Platelet count increased after <i>H. pylori</i> eradication therapy in a patient with cITP
Neefjes et al. <i>Haematologica</i> 2007;92:576	III	Prospective study of <i>H. pylori</i> determination and eradication in children with chronic ITP	47	Eradication of <i>H. pylori</i> might be beneficial in treating chronic ITP
Jaing et al. <i>Acta Paediatr</i> 2007;92:1153–1157	III	Prospective study to determine the prevalence of <i>H. pylori</i> and evaluate whether <i>H. pylori</i> eradication can induce chronic ITP regression in children	22	An enzyme immunoassay for <i>H. pylori</i> antigens in faeces demonstrated eradication of <i>H. pylori</i> after treatment in all infected patients Five of the nine patients had increased platelet counts that persisted throughout the follow-up period'
Loffredo et al. <i>Eur J Pediatr</i> 2006;166:1067–1068	III	Prevalence of <i>H. pylori</i> infection and the effect of bacterium eradication on platelet count recovery in children (median age 136 months) with chronic ITP	39	8 patients tested positive for <i>H. pylori</i> infection and platelet counts did not improve following eradication treatment. Results do not suggest a pathogenic role of <i>H. pylori</i> in the aetiology of chronic ITP although study population too small to analyse statistically

### Bone marrow aspiration

Citation	LOE	Study design	Patient numbers	Summary
Vesely et al. <i>J Pediatr Hematol Oncol</i> 2000;22:55–61	III	US survey: to assess current physician self-reported practices regarding initial management of childhood ITP and to determine physician self-reported willingness to participate in randomised clinical trials comparing different initial management strategies	720	Primary measure: questionnaire to determine diagnosis and management of ITP in children 18 months, 5 years, and 15 years of age who were experiencing either dry or wet purpura Primary outcome: 57% response rate. Most physicians usually perform a bone marrow aspirate when corticosteroids are to be prescribed and

				administer drug therapy to patients with newly diagnosed ITP, with dry or wet purpura. Only 16% of respondents would administer no drug therapy to a child with dry purpura. IVIg preferred to steroids, with anti-D immunoglobulin prescribed less frequently. Bone marrow aspiration not essential in children
Klaassen et al. <i>J Pediatr Hematol Oncol</i> 2001;23:511–518	III	Decisional analysis: decision analysis tree was constructed to determine initial management of: initial bone marrow aspiration (BMA) in all patients, initial BMA only in patients at high risk, and empiric therapy for all patients without initial BMA, of a child >6 months, presenting with ITP, without blasts on the peripheral smear was constructed.	1	Primary measure: quality adjusted life years (QALY) Primary outcome: bone marrow aspiration not essential in children or indicated for newly diagnosed cases of ITP
Ahmad et al. <i>J Coll Physicians Surg Pak</i> 2007;17:347–349	IIb	Descriptive study to determine the need of bone marrow examination in children with ITP at initial presentation		Primary measure: file records reviewed for history, examination and investigations Primary outcome: mean platelet count was 33861/mm <sup>3</sup> . None of the bone marrow results showed presence of abnormal cells consistent with haematological malignancy. ITP was final diagnosis in 52 patients. Bone marrow aspiration should not be a part of routine work-up for diagnosing ITP in children and should be reserved for those children having atypical clinical and laboratory features
Watts. <i>Clin Pediatr (Phila)</i> 2004;43:691–702	IV	Retrospective chart review of natural history data, presenting features of ITP and response to therapy in children	409	Primary measure: increase in platelet count to >50k Primary outcome: ITP is a common paediatric disease presenting at any age with low morbidity and mortality; 91% of cases resolved with therapy or observation

### Antinuclear antibodies

Citation	LOE	Study design	Patient numbers	Summary
Pratt et al. <i>Am J</i>	IIb	Study of prevalence and significance of	31	Patients with acute ITP who also have other

<i>Hematol</i> 2005;79:175–179		autoantibodies found at the time of diagnosis of childhood ITP, to correlate their presence with risk for development of chronic ITP		autoantibodies may be more likely to develop chronic ITP than those lacking these autoantibodies. Larger studies are needed to determine whether the presence of ANA is predictive of clinically significant autoimmune disease
Altintas et al. <i>J Thromb Thrombolysis</i> 2007;24:163–168	IIb	Retrospective analysis of children and adult patients with ITP to determine clinical significance of ANA test in ITP patients	473	ANA positivity potential indicator in terms of chronicity for childhood ITP. Large-scale studies should be considered to determine the significance of ANA positivity and their utility in differentiating acute from chronic ITP

### Antiphospholipid antibodies

<b>Citation</b>	<b>LOE</b>	<b>Study design</b>	<b>Patient numbers</b>	<b>Summary</b>
Dash et al. <i>Ind J Ped</i> 2004;71:505–507	IIb	Study investigating prevalence and clinical significance of APAs in paediatric ITP patients	40	27.5% patients were lupus anticoagulant positive at diagnosis; 5 of these 11 cases were still positive at 6 months
El-Bostany et al. <i>Blood Coagul Fibrinolysis</i> 2008;19:26–31	IIb	Study of predictive values of elevated anti-beta2-GP1 or aCI concentrations for secondary ITP detection, comparing levels with steroid therapy responsiveness in children and adolescents	42	Elevated cardiolipin antibody or anti-beta2-GPI serum IgG isotype concentrations occurred in all 9 splenectomised ITP children with positive APA. Great attention should be paid to both assays as predictors for steroid therapy response