

IMMUNE-MEDIATED THROMBOCYTOPENIA IN ADULTS: TREATMENT UPDATES

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Immune Thrombocytopenia (ITP) is an acquired low platelet count resulting from immune-mediated platelet destruction and/ or impaired platelet production. Primary ITP is idiopathic and secondary ITP is associated with another conditions. The incidence is 1 to 6 per 100,000 adults. ITP may present without symptom or present with bleeding. Bleeding manifestations are minor (skin/mucous membrane), critical (e.g. intracranial, intraocular, retroperitoneal, intramuscular bleeding etc) and severe (fall in hemoglobin of 2 g/dL or requires transfusion of e^2 units of red cells). ITP is diagnosed on the basis of isolated thrombocytopenia without anemia or leukopenia. There are no reliable laboratory tests to confirm the diagnosis. The aim of treatment of ITP is to provide a safe platelet count to prevent bleeding, rather than to normalize the platelet count. Treatment options of ITP are the First-line therapies, second-line therapies and therapies. First-line therapy are for patients with severe bleeding and platelet count $<30 \times 10^9/L$, which includes platelet transfusion, glucocorticoids (e.g. methylprednisolone, 1 g IV, daily for 3 doses; or dexamethasone, 40 mg orally or IV, daily for four days), IVIG and IV globulin. Second-line therapy is indicated for patients with thrombocytopenia associated with significant bleeding or for severe, persistent or recurrent thrombocytopenia (e.g., platelet count $<20 \times 10^9/L$) following glucocorticoid-based treatments. Second-line therapies include splenectomy, rituximab, thrombopoietin receptor agonist or immuno-suppressive therapy. Other therapies include danazol, vincristine, procarbazine, etoposide etc, or combination therapy. Indications of treatment are (1). Severe bleeding and platelet count $<30 \times 10^9/L$. (2). Newly diagnosed ITP and any clinically important bleeding (3) Newly diagnosed ITP and platelet count $<20 \times 10^9/L$, even in absence of bleeding (4) Patients with platelet counts $>30 \times 10^9/L$ having risk of bleeding, other hemostatic defects or require surgery. Spontaneous remission occurs in up to 10% of adults with ITP.

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