

**Faculty of Nursing , Pharmacy, & allied Health Sciences**

**Course: Adult Health2 (NURS2311)**

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**Section: 2**

**The Assignment:**

**Describe Immune thrombocytopenic purpura (ITP) in term of pathology and medical management and S & S and what is the nursing role?!**

**The Answer:**

* **Pathophysiology of ITP:**

**ITP is an autoimmune disorder characterized by a destruction of normal platelets by an unknown stimulus. Antiplatelet antibodies develop in the blood and bind to the patient’s platelets. These antibody bound platelets are then ingested and destroyed by the reticuloendothelial system (RES) or tissue macrophages. The body attempts to compensate for this destruction by increasing platelet production within the marrow. The compensatory mechanism may not be effective as thrombopoietin levels are not elevated in patients with ITP , and as such , platelet production may be diminished. As stated previously, viral illness (e.g. hepatitis) may lead to ITP. Medications ( e.g. sulfa drugs), as well as diseases such as systemic lupus erythematosus or conditions such as pregnancy, can also induce ITP.**

* **Medical Management:**

**Treatment for ITP usually involves several approaches. If the patient is taking a medication known to be associated with ITP ( e.g. quinine, sulfa- containing medications), then that medication must be stopped immediately. The mainstay of short- term therapy is the use of immunosuppressive agents. These agents block the binding receptors on macrophages so that the platelets aren’t destroyed. Platelet counts typically begin to rise within a few days after institution of corticosteroids therapy. The platelet counts tend to drop once the corticosteroids dose is tapered, but it often can remain at an adequate level. The immunosuppressant azathioprine (Imuran) may also be indicated, particularly when some form of “maintenance” therapy is needed to maintain the platelet count. IVIG is also commonly used to treat ITP. It’s effective in binding the receptors on the macrophages, however high doses are required, the drug is very expensive , and the effect is transient. Splenectomy is an alternative treatment and results in a sustained normal platelet count approximately 50% of the time, although many patients can maintain a safe platelet count of more than 30000/ mm3 after removal of the spleen.**

* **Clinical Manifestations (Signs & Symptoms):**
1. **Bruising.**
2. **Heavy menses.**
3. **Petechiae (pinpoint, round spots that appear on the skin as a result of bleeding**) **on the extremities or trunk.**
4. **Hemoptysis.**
5. **Intracranial bleeding in patients with wet purpura.**
6. **Low platelet count (less than 30,000/ mm3).**
* **Nursing Management:**

**Nursing care includes an assessment of the patient’s lifestyle to determine the risk of bleeding from activity. A careful medication history is also obtained , including use of over the counter medications, herbs, & nutritional supplements. The nurse must be alert for sulfa- containing drugs & others that alter platelet function (e.g. aspirin- based or other NSAIDs). The nurse assesses for any history of recent viral illness and reports of headache or visual disturbances, which could be initial symptoms of intracranial bleeding. Patients who are admitted to the hospital with wet purpura & low platelet counts should have a neurologic assessment incorporated into their routine vital sign measurements.**