

Treatment of Auto Immune Thrombocytopenic Purpura (ITP) – A Case Study

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Abstract

ITP (Immune thrombocytopenic purpura) is a blood autoimmune disorder that causes a decrease in platelet count. Platelets are blood cells that help to stop bleeding. And a sudden decrease in platelets can cause internal bleeding. The condition of ITP can be acute or chronic. An acute infection often appears to be an initial trigger, but that may only potentiate an already established immunologic disturbance. An acute ITP in children often goes away on its own within a few weeks or months, and for a few, this does not go away on its own; it can only then be treated. It has been seen that modern medicines have no such effective treatment for ITP. A 1.5-year-old baby girl has been seen with complaints of red spots and bruises on her body. The symptoms are almost related to ITP. And after a clinical diagnosis, it was concluded that she has ITP. In Ayurvedic terms, ITP is associated with Triyagata Rakatpitta. A case study shows the effective results of giving the ayurvedic herbal formulations to the patient. The patient was given Plato Plan syrup along with Kumar Kalyan Kalyan ras, Suvaran basant malti ras, and Praval panchamrit ras. After a month, the patient reported relief from some symptoms. Her platelet count increased from 50,000 to 1,54,000. After completing the ayurvedic treatment for approximately three months, the problem of low platelets gets reduced.

Keywords: ITP, Tirayaka Rakatpitta, Platoplan SYRUP, Kumar Kalyan Ras, Praval Panchamrit Ras, IMMUNE BOOSTER, Platelet Count.

Introduction

ITP (Immune Thrombocytopenic Purpura) is an autoimmune disease that is characterised by a low platelet count. This causes purpura to develop on the skin and may cause bleeding due to the presence of antibodies that target platelets and damage them. Although ITP can be seen at any age, it is especially common in children and young people. The acute ITP that is seen in childhood shows acute bleeding. Chronic ITP is seen in teenagers and starts insidiously. The skin bleeding is like purpura and ecchymosis. This disease manifests itself in two ways: either through the upper tract or through the lower tract. If a patient has kapha dominance in his body, the blood comes out through the upper tracts via the ear, nose, eyes, and mouth. And in a patient whose

body is dominated by the vata, then the blood comes out through the lower tracks via the urethra and anus.

In ayurvedic terms, ITP is linked with the raktapitta. The pitta here is called 'rakatpitta' because it comes in contact with rakta (blood). There are a few complications seen in Rakatpitta, such as weakness, anorexia, indigestion, dyspnea, coughing, fever, diarrhea, oedema, anemia, and hoarseness of voice.

Cautionary symptoms of Raktapitta include:

- Loss of appetite
- improper digestion of food that results in the burning sensation in the chest
- frequent urge to vomit
- Prostration of the body
- Burning sensation all over the body
- Appearance of pimples, bodyache
- A change in coloration of different organs of the body: stool, urine, sweat, saliva, and excreta from the nose and mouth.

CASE STUDY:

A 1.5-year-old baby girl is from Gurdaspur, Punjab. In 2019, her parents noticed red spots and bruises on her body and visited the nearby hospital. The doctor advised them of some inspections and diagnosed her with ITP. She was admitted to the nearby hospital. In the initial stage, her platelet count was only 40,000. During hospitalisation, the doctor gave her steroids, and platelets were transfused, and her platelets increased to 1 lakh. Then they discharged her and put on medicines. After 3 weeks, her platelets again decreased to 50,000. Then they came to know about Dr. Vikram Chauhan, and they visited his clinic, Planet Ayurveda, in Mohali and started taking treatment from him in November 2019. At that time, her platelet count was only 77,000. After seeing all the previous history and observations, the doctor prescribed her herbal medications. Within 1 month of treatment, her platelets started increasing, and her steroids were also stopped. Her platelet count remains above 1,15,000.

Diet history: as the patient was a 1.5-year-old child, she was totally dependent on the mother's feed; whatever is consumed by the mother is going to affect her.

Findings:

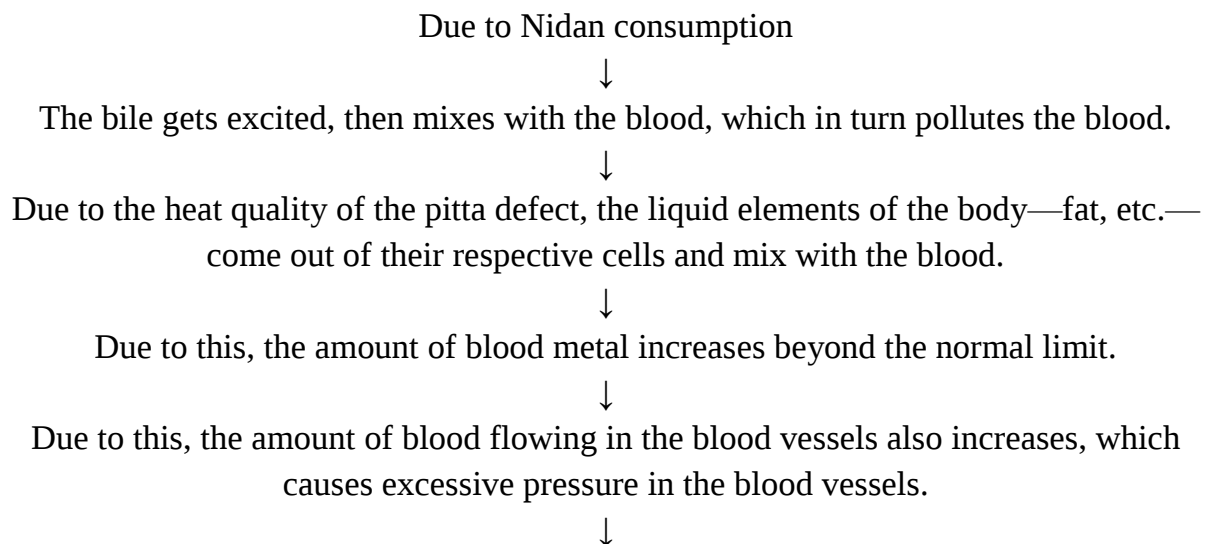
1. **General Assessment:** There was no such history of serious sickness seen in the patient. Her pulse rate was normal. She was suffering from the red bruises and has very low immunity.

2. **Local inspection:** The patient had no severe deformity. She had red bruises on her body.
3. **Systemic investigation:** The patient was aware of the date, time and location. Her cardiovascular and respiratory systems were also normal. The findings of the eightfold examination were as follows:
 - **Nadi** (Pulse), Pitta Pradhan and Kaphanubandhi
 - **Mutra** (Urination) and Mala (bowel habit) were usual.
 - **Jiva** (Tongue) was coated.
 - **Shabda** (Speaking) was normal.
 - **Sparsh** (Palpation) was normal.
 - **Drik** (Vision) was normal (6/6 both eyes).
 - **Akriti** (Built) was normal.

The tenfold examination revealed:

1. **Dushya** (Any tissue of the body that gets vitiated) was Rakta Dhatu.
2. **Desha** (Habitat): Sadharan
3. **Bala** (Strength): Madhyam
4. **Kala** (Time)-sharad ritu
5. **Agni** (Digestive fire): Mandya
6. **Prakriti** (Body constitution)—Pitta—Kapha
7. **Vaya** (Age): Vaya (child).
8. **Satva** (Psychic condition): Madhyam
9. **Satmya** (Homologation): sheet jala (cold water)
10. **Ahar** (Diet): A liquid diet more like plant based milk and food 2-3 times a day.

4. Raktapitta Samprapti:



Due to blood pressure and the heat of the bile, some of the channels of the blood vessels get damaged, and blood starts flowing from various parts of the body.



The blood will be from the mouth, nose, ears, eyes, skin, anus, penis and vagina (nava-dvaar).



This blood discharge of blood absorbed by the pitta from various parts of the body (nava-dvaar) is called raktapitta.

5. Investigation: for the confirmation of ITP, a CBC test will be done; this will show the platelet count. The platelet count was only 40,000; the decreased value of platelets in the CBC indicates ITP. Based on the medical history given by the patient's parents and pathological reports, the exact diagnosis of the patient was ITP (immune thrombocytopenic purpura).

6. Therapeutic measures: The patient was instructed to take medicines including suvaran basant malti ras, kumar kalyan ras, Praval panchamrit ras , Arvindasav, Carimax syrup, Plato plan syrup, spirulina capsule and an immune booster. All of these medicines are to be taken by her once a day with plain water.

Table No. 1 lists the ingredients for PLATO PLAN SYRUP in detail:

Results and follow-ups:

- **1st follow-up result (after 30 days):** the patient's parent noticed the changes in the baby child; she was doing well and feeling healthy ; and she is also following all the medications from the last 20 days.
- **2nd follow-up result (after 60 days):** after following the strict diet plan along with the medications, her parents found her so healthy, and all the symptoms were reduced to 65%.
- **3rd follow-up result (after 90 days):** after taking an ideal course of 3 months , the patient is completely recovered and has no such symptoms of ITP seen, and the platelet count was also increased.

GRAPHICAL ILLUSTRATION

The below graph shows the increase in platelet count as the Ayurvedic treatment started:

Sr.no	Sanskrit name	Common name	Botanical name	Rasa	Vipaka	Veerya	Action
1.	Erand karkati	Papayaa	<i>Carica papaya</i>	Tikta, Katu	Katu	Ushna	Pacifies Kapha and Vata Dosha
2.	Giloy	Guduchi	<i>Tinospora cordifolia</i>	Kshaya, Tikta	Madhura	Ushna	Balances tridosha
3.	Wheat grass	Godhuma patra	<i>Triticum aestivum</i>	Madhur	Madhura	sheeta	Balances all tridoshas
4.	Ashwagandha	Ashwagandha	<i>Withania somnifera</i>	Kshaya, Tikta, and Katu	Katu	Ushna	Balances tridoshas
5.	Amalaki	Amla	<i>Embolica officinalis</i>	Madhur, Amla, Katu, Tikta and Kashaya	Madhura	Sheeta	Balances all tridoshas
6.	Shigru	Moringa, Shobhanjan	<i>Moringa pterygosperma</i>	Katu, Tikta	Katu	Ushna	Balances Kapha and Vata Dosha
7.	Jivanti	Dodi shak	<i>Leptadenia reticulata</i>	Madhur	Madhura	Sheeta	Balances all the tridosha
8.	Draksha	Kishmish	<i>Vitis vinifera</i>	Madhur	Madhura	Sheeta	Balances Vata and Pitta, also Kapha nourishing

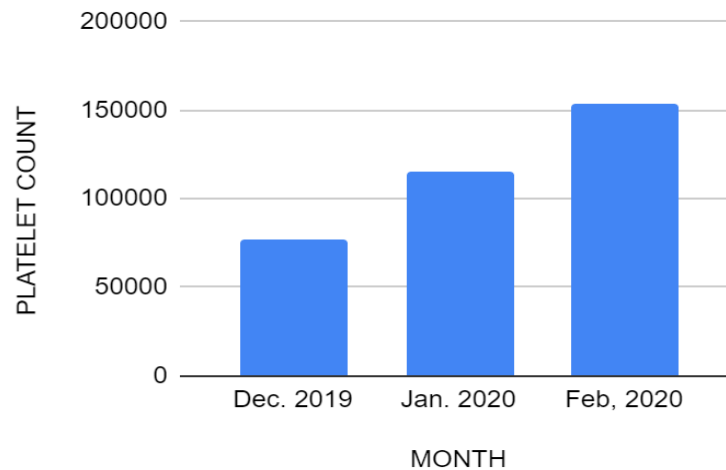


Table No. 2 shows how medications affect hematological parameters.

S. No	Time/ duration	Patient's condition before Planet Ayurveda's treatment	Patient's condition after Planet Ayurveda's treatment
1.	1 st month	40,000 (8, Nov. 2019)	77,000 (7 Dec. 2019)
2.	2 nd month		1,15,000 (Jan. 11, 2020)
3.	3 rd month		1,54,000 (3 Feb. 2020)

Table No. 3: Follow-up Treatment.

Date	Treatment plan	Aushadi Sevan Kaal	Symptoms observed on follow-up
8, Nov. 2019	Plato plan syrup, Suvaran basant malti ras, Kumar Kalyan ras, Praval Panchamrit ras, Spirulina capsules,	1 capsule, 1 tablet and 2 teaspoons of syrups in a day.	Red bruises, nose bleeding, pain in the legs, and irritability.

	and immune booster capsules Arvindasav and Carimax syrup.		
7, Dec. 2019	Continue all medications along with Makar Prash, Cloto Plan syrup and Hemo Plan syrup.	1 teaspoonful of makarprash, and the rest are the same (2 teaspoonfuls).	No pain; red bruises started to disappear.
11, Jan. 2020	Continue the same medications along with the tablet Balark Ras.	two tablets a day.	No major symptoms were observed.
3 Feb. 2020	Continue all medications.	same	Fully treated, and the platelet count is not reducing.

Discussion

ITP (Immunothrombocytopenic Purpura) may be associated with Triaygata Rakatapitta. The common symptom of ITP is bleeding, and patients who are older are more prone to bleeding. The patient shown here has red spots and bruises, irritability and even pain. In Ayurveda, this can be correlated with the Triyagata Rakatapitta. Rakatpitta is a disease characterized by bleeding from various parts of the body. It has been seen that excessively hot and sharp food products are responsible for Pitta getting aggravated and rakta (blood) exceeding its normal quantity. When the rakta exceeds its normal quantity, it results in the opening of the entrances of channels of circulation, which originate from the spleen and liver.

Pathology

The increased destruction of platelets leads to ITP, as in this disease the immune system is stimulated to attack your body's own platelets. The antibodies are produced against platelets. The B cells and plasma cells are abnormally regulated and produce autoantibodies, which bind platelets and megakaryocytes (large nucleus cells) and induce impairment and/or degradation in the spleen and liver. The low levels of blood platelets can make it more difficult for blood to clot and cause bruises to form on the patient's body. In this case study, decreased platelets cause internal bleeding.

Table No. 4 shows the mode of action of all the medicines.

S.no.	Names of medicines	Action
1.	Plato plan syrup	It helps in blood purification, has antioxidant-rich properties , boosts the immune system, and stimulates the bone marrow for the production of platelets.
2	Suvaran basant malti ras	It has immunomodulatory effects.
3	Kumar Kalyan Ras	It has immunomodulatory effects.
4	Praval panchmarit ras	It alleviates burning sensations in the stomach and abdomen by reducing the ushna and teeshna properties of the pitta.
5	Spirulina capsules	It increases the production of antibodies and helps in energy release.
6	Immune booster	It strengthens the body's immune system against disease-causing pathogens.
7	Arvindasav	It specifically stimulates hunger and overall promotes the child's optimum growth and development.
8	Carimax syrup	It has membrane-stabilizing properties and prevents platelet lysis.
9	Makar prash	It works against various infections , reduces stress, increases stamina and also enhances proper growth and development.
10	Cloto plan syrup	It helps in controlling bleeding .
11	Hemoplan syrup	It increases hemoglobin and helps with general weakness; it is a natural blood purifier.
12	Balarak ras	It is helpful for a variety of complications, including chronic fever in children.

The patient was instructed to avoid processed food products, non-vegetarian food, spicy food and citrus fruits. It is mandatory to consume two types of juices daily: green juice and red juice.

Green juice: spinach, papaya leaves, mint leaves, wheatgrass, amla, green grapes, durva grass.

Red juice: beetroot, carrot, pomegranate, rhododendron, apple, and ashwagandha leaves.

The patient's point of view:

The baby girl's parents were very upset, and they were looking for permanent treatment for ITP. The baby girl was so irritated with the symptoms of ITP, especially the bruises, pain in the legs and hands, and many other problems. Her parents admitted her to the local hospital for treatment, and the platelets increased for a few days, then dropped off suddenly, and she fell so sick. Then they started following her with the Ayurvedic treatment; her symptoms and all the inner weakness disappeared, and fortunately, she started recovering within a month. Her parents were so happy and thanked the doctor; the patient was also cured and living a healthy life.

Informed permission:

The patient's written informed consent has been obtained in order to publish for the benefit of scientific society's knowledge.

Conclusion:

Chronic ITP can be treated with ayurvedic herbal formulations. The platelet count can be maintained by the dietary supplements along with the medications. The red bruises and other symptoms were reduced without any recurrence. After undergoing all the diagnostic procedures, such as a bone marrow biopsy and corticosteroids, the patient would not get relief from the allopathic medicine. Her situation was getting terrible, and her parents switched the treatment to Ayurveda. here , she was given the number of medicines with the lowest dosage daily. And within a month, the platelet count increased and never fell. The medications gave her a well-balanced immunity, gave strength to the body as well, improved the bruises and produced antibodies that helped fight against the antigens. The medications used in the treatment of ITP have antioxidant, anti-inflammatory, immunomodulatory and anti-microbial effects. These beneficial effects of the medications prevent platelet destruction by the immune system. Thereby, all the symptoms of ITP were slowly removed, and the platelet count also increased and was maintained. The patient's parents were satisfied with the treatment.

References

1. Shulman N.R., Marder V.J., Weinrach R.S. Similarities between known antiplatelet antibodies and the factor responsible for thrombocytopenia in idiopathic purpura. Physiologic, serologic and isotopic studies. Ann. N.Y.Acad. Sci. 1965;124:499–542. doi:10.1111/j.1749-6632.1965.tb18984.x

2. Provan D., Newland A.C. Current Management of Primary Immune Thrombocytopenia. *Adv. Ther.* 2015;32:875–887. doi:10.1007/s12325-015-0251-z.
3. Agnivesha, Charaka samhita of Charaka and Drdhabala with Vaidyamanorama commentary edited by Acharya Vidyadhar Shukla, Ravi Dutt Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, Reprint 2011, Nidanasthana, 2nd chapter, shloka no.4-6, p484-485.
4. Sushruta, Sushruta samhita, edited by Vaidya Yadavji Trikamji Acharya, Shareera sthana Chapter 10, Verse 4, Chowkambha sanskrit samsthan, varanasi, reprint 2013, p. 387.
5. Shri. Bhavamisra, Bhavaprakasa Nighantu, edited by the late Dr. G. S. Pandey Chaukhambha Bharati Academy Varanasi, Reprint, 2015; 372
6. Takahashi T., Yujiri T., Shinohara K., Inoue Y., Sato Y., Fujii Y., Okubo M., Zaitzu Y., Ariyoshi K., Nakamura Y., et al. Molecular mimicry by *Helicobacter pylori* CagA protein may be involved in the pathogenesis of H. pylori-associated chronic idiopathic thrombocytopenic purpura. *Br. J. Haematol.* 2004;124:91–96. doi:10.1046/j.1365-2141.2003.04735.x
7. Hill Q.A., Newland A.C. Fatigue in immune thrombocytopenia. *Br. J. Haematol.* 2015;170:141–149. doi:10.1111/bjh.13385.
8. Platelet count, previous infection and FCGR2B genotype predict development of chronic disease in newly diagnosed idiopathic thrombocytopenia in childhood: Results of a prospective study. Bruin M, Bierings M, Uiterwaal C, et al. *Br J Haematol.* 2004;127:561–567.
9. Managing ITP and thrombocytopenia in pregnancy. Eslick R, McLintock C. *Platelets.* 2020;31:300–306.
10. A comparison of intravenous immunoglobulin (2 g/kg total) and single doses of anti-D immunoglobulin at 50 µg/kg, 75 µg/kg in newly diagnosed children with idiopathic thrombocytopenic purpura: Ankara hospital experience. Alioglu B, Ercan S, Tapci AE, Zengin T, Yazarli E, Dallar Y. *Blood Coagul Fibrinolysis.* 2013;24:505–509.