

**THERAPEUTIC ROLE OF *ATRUSHKADI KASHAYA* IN THE MANAGEMENT OF
IDIOPATHIC THROMBOCYTOPENIC PURPURA WITH REFERENCE TO *TIRYAK
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ABSTRACT

Idiopathic thrombocytopenic purpura is autoimmune disorder with decreased blood platelets. Major causes are autoimmunity, decreased bone production, increased splenic sequestration. Body produces antibody against its own platelets; result in internal bleeding, thrombocytopenic purpura and petechiae. In *Ayurveda* it can correlate with *Tiryak Raktapitta*. As there is no specific treatment in modern medicine for autoimmune disorders. *Ayurvedic* medicines may prove an important therapy in this disease. Idiopathic Thrombocytic Purpura can be controlled by using hepatoprotective drug, by decreasing capillary haemorrhage, enhancing immune system.

KEYWORDS: Idiopathic thrombocytopenic purpura, petechiae, *Raktapitta*.**INTRODUCTION**

Idiopathic thrombocytopenic purpura is autoimmune disorder most occurring around 2-4 years (6.4/100000 children)^[1]

Causes are usually unknown or autoimmune disorder or follow viral illness.

Major causes are decreased bone marrow production, increased splenic sequestration. ITP can be correlated with *Tiryak Raktapitta* on the basis of signs and symptoms.

AIM AND OBJECTIVES

1. To find probable causes of ITP and its management by Ayurvedic approach.
2. To find therapeutic role of *Aatrushkadi Kashaya* in the management of ITP with reference to *Tiryak Raktapitta*.

MATERIALS AND METHODS

The data and materials are collected from textbook of pediatrics, *Ayurvedic Samhitas*, references from various journals, different persons practicing on this topic, many web searches related with ITP etc.

Clinical manifestations

ITP is a serious bleeding disorder characterized by isolated thrombocytopenia (platelet count < 1,50,000 /cumm) sometimes follow viral illness.

Boys younger than 10 years had higher incidence of ITP.^[2] Platelet production occur in bone marrow.

ITP is common complication of CLD caused by under production of hormone thrombopoietin in the damaged liver or increased destruction of platelet through phagocytosis in enlarged spleen as well as loss of haemopoetic function in bone marrow^[3]

Clinical features depends on degree of ITP

- up to 20 × 10⁹/L = easy bruising, petechiae.
- Below 20 × 10⁹/L = spontaneous bleeding skin bruises easily heavy internal bleeding.^[4]

So, to treat thrombocytopenia we should work on the drug improving function of liver, spleen and bone marrow.

Ayurvedic approach

According to ayurveda *Samhitas* ITP can be correlated with *Tiryak Raktapitta*.

According to Ayurveda in *Raktapitta* all the *Doshas* are vitiated and that causes destruction of platelets in blood stream and manifested subcutaneously.

“तैहेतुभिः समुक्लिष्टं पित्तं रक्त प्रपद्यते

तद्योनित्वात् प्रपन्नं च वर्धते तत् प्रदुषयत ।

तस्योष्मणा द्रवो धातुर्धातोर्धातोः प्रसिच्यते ।

स्विद्यतस्तेन संवृद्धि भुयस्तधिगच्छति” ॥ १ ॥^[5]”

Raktapita is a bleeding disorder where *rakta* is vitiated by *pitta* flows out of opening in the body such as skin, nose, ears, eyes, mouth etc. In *Triyak Raktapita* those openings are root of sweat gland and sebaceous gland present at subcutaneous layer of skin.

When all *Doshas* are vitiated and circulated in bloodstream, the manifestation are seen in subcutaneous layer of skin.

“पित्तरक्तस्य विक्रते संसर्गाद् दुषणादपि ।
कुपितं रोमकुपेशच समस्तेस्तत्प्रवर्तते ॥^[6]”

According to *Ayurveda* liver and spleen are the main functional organs related mainly with production of *Rakta Dhatu*.

“पित्तं रक्तस्य विक्रते : संसर्गाद् दुषणादपि ।
गन्धवर्णानु व्रतेश्च रक्तेन व्यपदिश्यते ।
प्रभवत्यस्रज्यः स्थानात् प्लीहतो यकृतश्च तत् ॥^[7]”

When there is *Raktadhatu dushti*, there is definitely disturbance in *Pitta Dosha as Rakta and pitta have ashraya ashrayi bhav*.

“तत्रास्थिती स्थितो वायुः ।

पित्तं तु स्वेदरक्तयोः ॥

यदेकस्य तदनस्य वर्धनक्षपनोषधम् ॥^[8]”

So according to *Ayurveda* if we have to treat *Triyak Raktapita* we should work with drug acting on liver and spleen and drugs possessing *Pittadosha shamak* properties.

TREATMENT

There is no sure treatment of ITP according to modern except immunoglobulins and steroid.

According to pathophysiology of disease we should work with drug acting on liver, spleen and bone marrow function according to *Ayurveda* on *Rakta dhatu* and *Pitta Dosha*. To increase platelet count here is one reference we can use over it.

आट्टरुषकादि क्वाथः

“आट्टरुषक मुद्दिका पथ्या क्वाथ सशर्करः ।

मधुमिश्र श्वास कास रक्तपित्त निबर्हण ॥^[9]”

Work by its *Kashaya Rasa*

Name	Latin name	Rasa	Virya	Vipak	How effect on ITP
Atarushak	Adathoda vasika	Tikta, Kashaya	Shit	Katu	Increase platelet count
Haritaki	Terminalia chebula	Pancharasa lavan rasa varjit	Ushna	Madhur	Decrease capillary haemorrhage
Mrudvika	Vitis vinifera	Madhur	Madhur	Shit	Hepatoprotective
Madhu	Mellarius	Kashaya	Ushna	Shit	Improve digestion, Rasayan

1. आट्टरुषक

“वासको वातर्हृत स्वयः कफपित्तास्रनाशनः ॥^[10]”

Chemical compounds in *Justica adhatoda* includes Vasicine, Quinazolidine, essential oil, fats proteins, resins, sugars, gum, amino acids & vit.C.

Increase platelet associated with significant hyperplasia of megakaryocytes in bone marrow. Control capillary hemorrhage.

Vasaka exhibited marginal increase in WBC count to extent of 16%. Vasaka showed statistically significant protective effect against cyclophosphamide induced myelosuppression to an extent of 80%.

2. MRUDIVIKA:

मुद्दिका

“रक्तपित्तज्वर श्वासत्रुष्णा श्रयापहा ॥^[11]”

Contain vit c, iron

Vit.c facilitates absorption of iron, strengthens collagen of blood vessel, connective tissue prevent blood vessel damage strengthens immune system. Grape polyphenols have significant effects on the level of blood glucose, lipid profile, blood pressure, as well as beneficial activities in liver and heart with various mechanisms.

3. PATHYA (HARITAKI)

पथ्या

“स्वादुतिक्तकषायत्वात् पित्तर्हृत सा ॥^[12]”

The fruits contain tannins such as Chebulinic acid, corilagin. It also contain 18 amino acid, and little amount of phosphorous, succinic, quinic acid and Shikimic acids. In ripening fruit the number of tannin decreases and acidic level increases. The volatile oils are present in the kernel of seeds. Also, *Haritaki* contain vit c. It prevents capillary haemorrhage.

4. SHARKARA:

Provides (glucose) for all the process for increasing platelet production

5. MADHU:

मधु

“कषायपित्तकफहा गुरुरस्रविशोधनः ।

रोपण शीतः क्लेदमेदोविशोषणः ॥^[13]”

CONCLUSION

Comparing Idiopathic Thrombocytic Purpura with *Triyak Raktapitta* we successful achieve targeted platelet count by using drug act on *pitta Dosha*, *Rakta Dhatu* acting on liver spleen and bone marrow. In this way Idiopathic Thrombocytic Purpura can be controlled by using hepatoprotective drug, by decreasing capillary haemorrhage, enhancing immune system.

Hence proved that *Aatrushkadi kwath* successfully increase platelet count in ITP.

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