ORIGINAL RESEARCH PAPER

General Medicine

INTRACRANIAL BLEED SECONDARY TO IMMUNE THROMBOCYTOPENIA DIAGNOSED AS MIXED CONNECTIVE TISSUE DISORDER-A CASE REPORT

KEY WORDS:

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ABSTRACT

Background: Idiopathic thrombocytopenic purpura (ITP) is an autoimmune disorder characterized by immune-mediated platelet destruction, leading to bleeding complications. Mixed connective tissue disorder (MCTD) is a rare autoimmune overlap syndrome that may present with features of systemic lupus erythematosus, scleroderma, and polymyositis. The coexistence of ITP and MCTD is uncommon and can complicate the clinical course, particularly when life-threatening events like intracranial hemorrhage occur. **Case Presentation:** We report the case of a [patient's demographics, e.g., 35-year-old female] who presented with symptoms of severe headache, altered sensorium, and ecchymoses. Clinical evaluation and investigations revealed thrombocytopenia with evidence of an intracranial bleed. Further autoimmune workup confirmed a diagnosis of MCTD. The patient was managed with a combination of corticosteroids, immunosuppressants, and supportive care, leading to clinical stabilization and significant recovery. **Conclusion:** This case underscores the importance of considering systemic autoimmune disorders like MCTD in patients presenting with ITP and severe complications such as intracranial hemorrhage. Early recognition and multidisciplinary management are crucial for favorable outcomes.

INTRODUCTION

Immune thrombocytopenic purpura(ITP) is a syndrome characterized by defects in immune regulation, resulting in decreased platelets , and symptoms such as mucocutaneous bleeding . ITP can be idiopathic or secondary to connective tissue disorders . ITP can present incidently with Low platelet count or with symptoms like menorrhagia, intracranial bleed. Mixed Connective Tissue Disorder(MCTD) is a systemic autoimmune disorder which has overlapping features of SLE ,systemic sclerosis with positive anti-u1RNP antibodies being more common in females than in males. Characteristic features include raynauds phenomenon, sclerodactyly, swollen joints, arthritis.

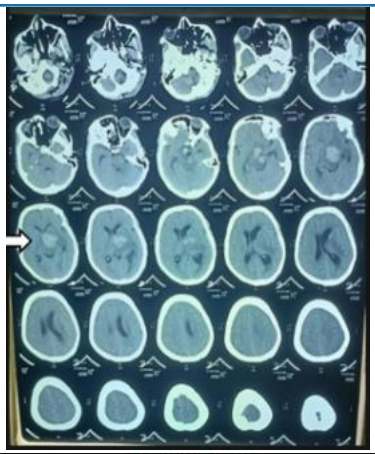
Immune thrombocytopenic purpura can be primary (80%)or secondary (20%).The main objective is evaluate for cause of secondary ITP and recognising possible complications to manage and resolve them timely with adequate measures.

Case Study

41 year old female Jayashree , presented with complaints of petechiae over bilat lower limbs since 1 week and menorrhagia since 4 days .Petechiae gradually increased and extended from ankle up to thigh region . She had similar complaints 1 month back for which local treatment was taken . There was no history of ayurvedic medications or any chronic illness. On examination, patient was vitally stable ,significant pallor was present. Systemic examination was normal. Local examination showed petechiae measuring 2-3 mm on bilateral upper and lower limbs ,non-tender on touch. Reports on admission were suggestive of bicytopenia (Hb-4.6 and platelet -12000) with normal leukocyte count of 4500.Patient had high levels of serum ferritin with low serum iron s/o anemia of chronic disease. Patient then developed sudden weakness of right upper and lower limb with ptosis of left eyelid.

Urgent CT brain showed collection of 40*36 mm in left capsule-thalamic-ganglion region and extension into the ventricles suggestive of acute intraparenchymal hematoma with midline shift which was confirmed by MRI Brain.

Further Investigations Revealed The Following:
Investigations
MRI Brain plain suggestive of Bleed intracranially:



Investigations	
Serum creatinine	0.89 mg/dl
Hb	4.1 g/dl
Wbc	4500 cumm
Platelet	12000
SGOT /SGPT	45/38
Urine rountine	NAD
ESR/CRP	70/5
Immature Platelet fraction	Raised(>than normal)
ANA by IF	Positive(1:640 titre with dense speckled pattern)
ANA Blot	Strongly Positive for Sm/RNP s/o MCTD Positive for Ro 52 s/o autoimmune disease etiology
Complement levels(C3,C4)	NORMAL
Anti-cardiolipin Ab,Beta-2GP,Lupus Anticoagulant	NORMAL
Bone marrow aspiration and biopsy	Hypercellular marrow with trilineage maturation

Treatment options for secondary ITP include symptomatic management such as tranexamic acid for bleeding manifestations, platelet transfusions for low platelet count. The patient was admitted in intensive care and was started on Injection Romiplostim and steroids.

ICT lowering agents like mannitol helped to decrease midline shift and compression.Once clinically stable, pt was started Inj rituximab, steroids and supportive care such as physiotherapy.

This case highlights the importance of considering connective tissue disorder as cause for secondary ITP in a patient presenting with bleeding manifestations. Early recognition and prompt treatment is necessary to avoid future morbidity and mortality.

REFERENCES:

1. Rodeghiero, F., et al. (2009). "Standardization of terminology, definitions, and outcome criteria in immune thrombocytopenic purpura of adults and children: Report from an international working group." Blood, 113(11), 2386-2393.
2. Explains ITP's classification, diagnostic criteria, and outcomes.
3. Neunert, C., et al. (2019). "Immune thrombocytopenia (ITP) treatment recommendations update: A report from the American Society of Hematology." Blood Advances, 3(22), 3780-3817.
4. Highlights complications like intracranial bleeding and updated management strategies.
5. Sharp, G. C., et al. (1972). "Mixed connective tissue disease—an apparently distinct rheumatic disease syndrome associated with a specific