# CASE STUDY OF CRYOGLOBULINEMIA

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#### **ABSTRACT:**

Cryoglobulinemia is one of rare disorders characterised by presence of cryoglobulins (abnormal proteins) in the blood. Cryoglobulins clump together at cold temperatures, usually below 98.6degree Fahrenheit. The cause varies from person to person. Some of the most common causes include having an abundance of cryoglobulin in blood. To reve about this rare disorder, skin biopsy is done, Renal **disease** may occur secondary to thrombosis (type I **cryoglobulinemia**) or immune complex deposition (types II and III). The incidence of **renal disease** varies from 5-60%. Histologically, membranoproliferative glomerulonephritis is almost always the lesion in **cryoglobulinemia**.

#### **KEYWORDS:**

Cryoglobulinemia, renal disease, skin biopsy.

INTRODUCTION:Cryoglobulinemia is one of rare disorders characterised by presence of cryoglobulins (abnormal proteins) in the blood. Cryoglobulins clump together at cold temperatures, usually below 98.6degree Fahrenheit. The cause varies from person to person. Some of the most common causes include having an abundance of cryoglobulin in blood. To reve about this rare disorder, skin biopsy is done, Renal disease may occur secondary to thrombosis (type I cryoglobulinemia) or immune complex deposition (types II and III). The incidence of renal disease varies from 5-60%. Histologically, membranoproliferative glomerulonephritis is almost always the lesion in cryoglobulinemia.

Here, the patient is complaining of painful rash distributed at trunk, upper and lower limbs. Standard therapy for cryoglobulinemia include corticosteroids, immunosuppresants and plasmapheresis.

#### **CASE REPORT:**

## CASE:

A male patient of age 48 years was admitted to the local hospital with the chief complaints of painful rash distributed at trunk, upper and lower limbs for 45 days duration. The condition started one and half month ago by gradual onset and progressive course of painful purpuric eruption at both upper, lower limbs and trunk associated with fever, decreased urine output, dysuria, myalgia and weakness. he had past medical history of hypertension since 12 years and recurrent documented UTI. On examination, the patients BP:170/90, pulse:95beats/minute. Drug history of the patient include: captopril-25mg twice daily, amlodipine 5mg once furosemide-40mg once daily. Laboratory reports were as follows: WBC:12000/cmm, Haemoglobin: 6.8gm%, GFR:10.4ml/min, serum electrolytes: sodium:137mg/dl, potassium:6.8mg/dl, calcium:9mg/dl. Urine analysis: albumin:++, leucocyte esterase:+++, skin biopsy was done and revealed: consistent leukocytoclastic vasculitis with associated with cryoglobulinemia.





Management

of the condition: 2hemodialysis sessions, 3plasmapheresis sessions, pulse steroid [ methyl prednisolone] 0.5mg daily for 3days followed by oral prednisolone 60mg daily, cyclophosphomide 2mg/kg/day, imipenem 0.5g/12h, amlodipine 10mg once daily.

#### **DISCUSSION:**

Cryoglobulinemia is one of rare disorders characterised by presence of cryoglobulins( abnormal proteins)in the blood. Cryoglobulins clump together at cold temperatures, usually below 98.6degree Fahrenheit. The cause varies from person to person. Some of the most common causes include having an abundance of cryoglobulin in blood. To reve about this rare disorder, skin biopsy is done, Renal disease may occur secondary to thrombosis (type I cryoglobulinemia) or immune complex deposition (types II and III). The incidence of renal disease varies from 5-60%. Histologically, membranoproliferative glomerulonephritis is almost always the lesion in **cryoglobulinemia**.

#### **CONCLUSION:**

Cryoglobulinemia is a rare disorder, delaying the diagnosis and treatment of this condition may lead to additional morbidity and complications. A prompt recognition and precocious treatment and symptomatic therapy may prevent from further complication and also help in speedy recovery of the patient.

#### ABBREVIATIONS:

GFR: Glomerular filtration rate

WBC: white blood cells

#### **CONFLICT OF INTERESTS:**

Declared none

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