

# Ichthyosiform Sarcoidosis with Thrombocytopenia in a Child

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#### Introduction

Musculoskeletal

Gastrointestinal

Hematological

Subcutaneous nodules

Hypopigmented patches

➡Thrombocytopenia

Extremely uncommon <100 cases reported

Renal

Sarcoidosis chronic granulomatous multi-system disease

- Pulmonary
- Ocular
- Cardiac
- Neurological Cutaneous

Ichthyosiform lesions

Rare

Specific

95% systemic association No reports in children

Alopecia

Verrucous lesions

#### **Discussion**

Cutaneous involvement :25-30% cases. Many specific manifestations:

- Lupus pernio
- Infiltrated plaques
- Macular
- Papular
- Ichthyosiform
  - Precedes systemic involvement
    - Prognosis unaffected

Thrombocytopenia in sarcoidosis: 3 mechanisms hypothesized

- Hypersplenism
- Granulomas in bone marrow
- Auto-immune thrombocytopenic purpura (ITP).
  - Occur after onset of systemic disease
  - More common in dark-skinned patients
  - Poorer prognosis

Systemic corticosteroids ± IVIg: first-line treatment in systemic sarcoidosis, with significant response as seen in our case.

- Ichthyotic lesions improved significantly: unlike previous reported cases
- Hematologic : gradual and modest improvement, similar to previous reports

### **Conclusion**

- All cases of acquired ichthyosis should be seriously evaluated
- Extensive systemic evaluation of all cases of ichthyosiform sarcoidosis is warranted

### **Case Report**

#### Clinical

11 year-old boy presented with generalised cutaneous atrophy and hyperpigmented scaling over the face, trunk and distal extremities for last 6 months



Recurrent high-grade fever with arthralgia, myalgia, thrombocytopenia x 2 years Generalised lymphadenopathy No response to ATT Hepatosplenomegaly

### **Laboratory Investigations**

**Panuveitis** 

- CBC: Hb: 9.6g/dL, Platelet: 42,000/µL CECT Chest, Abdomen:
- ACE: 316 IU/L (8-52)
- Mantoux test- Negative
- **■** LN biopsy: granulomatous lymphadenitis
- BM biopsy: normal

- ground glass opacification, septal cardiomeglly, thickening, hepatosplenomegaly, lymphadenopathy
- **■** PET-CT: diffuse sytemic uptake, periarticular uptake

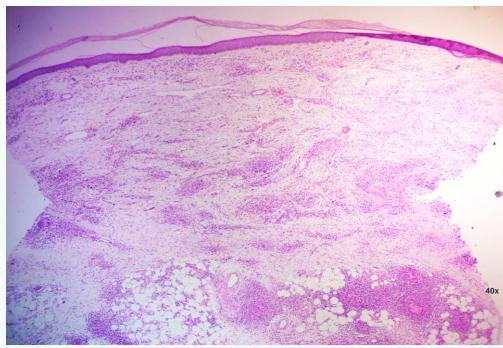
### **Treatment**

Oral prednisolone 1mg/kg, with IVIg 2g/kg

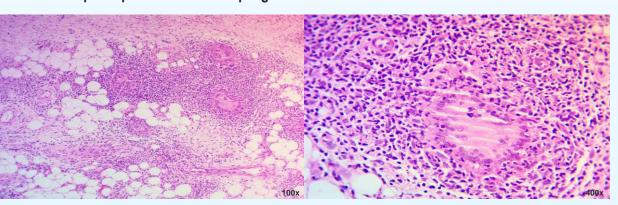


## Histopathology

Skin biopsy from ichthyotic region over leg



Atrophic epidermis and multiple granulomas in the lower dermis and subcutis



Epithelioid-cell granulomas with giant cells (Langhans and foreign body type) with lymphocytic cuff

#### References

- Rosenberg B. Ichthyosiform sarcoisis. Dermatol Online J [Internet]. 2005 Dec 30;11(4):15.
- Patel K, Lyon M, Hernandez C. Ichthyosiform sarcoidosis and systemic involvement. Cutis. 2018;102(6):408-
- Mahévas M, Chiche L, Uzunhan Y, Khellaf M, Morin AS, Le Guenno G, et al. Association of sarcoidosis and
- Reddy S, Ravicharan A, Narendrakumar N, Bhaskar K, Paramjyothi G. Thrombocytopenia as a presenting manifestation of sarcoidosis, J Med Allied Sci. 2018;8(2):94.