

# VEXAS SYNDROME

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- It is a rare autoimmune genetic condition with grave prognosis
- Vexas means

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| <b>V</b> | Vacuoles are after seen in cells identified in bone marrow biopsy   |
| <b>E</b> | E1 Ubiquitin activating enzyme I am code by the UBA1 gene which is mutated in patients                      |
| <b>X</b> | This gene is situated in the X chromosome   |
| <b>A</b> | Patient have auto inflammation  |
| <b>S</b> | Two mutation in the genes are somatic that is mutation are required at same point in life and are inherited |

## I. PATHOGENESIS

variants in UBA1 gene result in the production of enzyme ubiquitin activating enzyme D1 with reduced functions as a result damage protein build up inside the cells and this causes activation of immune cells or cells damage and death this leads to abnormal inflammation impaired blood cells development and other features of vexas syndrome

## II. CLINICAL FEATURES

1. Frequency rare condition one in 13,000 people are affected typically older adults primarily males are affected
2. Age 50 to 70 years
3. Joint involvement generally fever fatigue inflammatory arthritis
4. Skin involvement there is neutrophilic Dermotosis Leucocytoclastic vasculitis evidence of medium vessel vasculitis
5. Ocular involvement inflammatory eye disease

6. Ear relapseing chondritis and also sensorineural hearing loss
7. Pulmonary Alveolitis pleural effusion
8. Cardiovascular System myocarditis
9. Haematological myelodysplastic syndrome multiple myeloma cytopenia vacuoles in myeloid and erythroid cells
10. GI system hepato-splenomegaly and colitis

**Diagnosis genetic** genetic testing looking for mutations in UBA1 gene located in X chromosome

### **III. TREATMENT NEW STANDARD TREATMENT**

1. Inflammatory features are treated with steroids and other immunosuppressant
2. Bone marrow transplantation
3. Multidisciplinary approach where rheumatologist haematologist dermatologist are needed

### **IV. SARILUMAB IN ADULTS WITH POLYMYALGIA RHEUMATICA**

1. Polymyalgia rheumatica is a painful debilitating disease affecting the proximal muscles of upper and sometimes lower extremities
2. It is usually treated with high dose steroids
3. But it may be a few laps in time and there may be a steroid resistant variant of poly myalgia Rheumatica
4. It is in the these cases that saree new man which is and IL-6 receptor inhibitor find special place
5. Phase 3 of the SAPHYR study findings suggest that IL-6 inhibition buy sarilumab is very efficacious
6. It is well known that IL-6 is a key mediator in the pathophysiology of the disease it increases the remission rates and decrease inflammation
7. Significant improvement and sustained remission were achieved in comparison to placebo treatment
8. There was also less necessities of steroid

**Treatment** emergent adverse events were not significantly higher among sarilumab patients

- Dose 200 µg subcutaneous once in 2 weeks
- Side effects site opinions ANC if between 50000-100000 hold treatment
- low platelet 50,000 to 1,00,000 hold treatment
- Liver enzymes AST ALT 3 times the normal hold the treatment

## REFERENCE

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