

# The inhibition of the IL-17 Pathway in the Treatment of Systemic Vasculitis

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## INTRODUCTION:

**Vasculitis:** a heterogeneous group of disorders

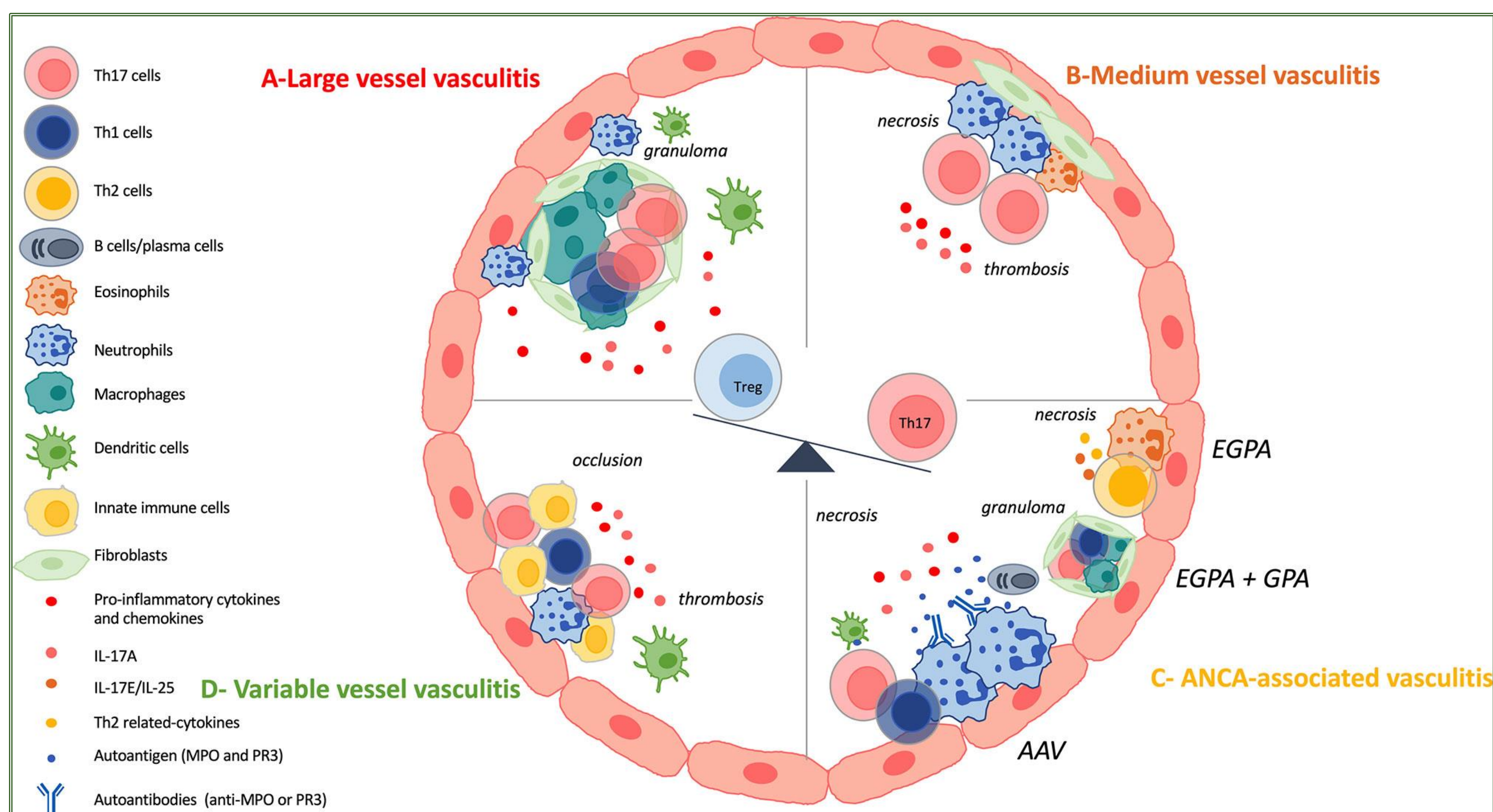
- Inflammation of blood vessels
- Inflammatory infiltrates
- Necrosis and remodeling

Additional mechanisms:

- Immune complex deposition
- complement activation and autoantibodies (ANCA-associated vasculitis)

VASCULAR INJURY

What about Cytokines?



## MATERIAL AND METHODS: Case Report

January 2025  
Male, 68 years  
Emergency Room:  
facial nerve palsy,  
ataxia, and muscle  
weakness.

autoimmune  
sensory-motor  
polyneuropathy

intravenous  
steroid pulses  
and  
immunoglobulins

IMPROVED NEUROLOGICAL CONDITION

## MEDICAL HISTORY

- **Nasal polyposis** that required surgery and recurred
- **Seronegative arthritis** treated with methotrexate and anti-TNF-alpha medication (adalimumab).
- **Crusting lesions** of the nasal (confirmed by ENT assessment)
- Right-sided **facial paralysis** (four years old) and left facial nerve **palsy** (twenty years old)
- **Postural instability** and distal **paresthesia** in upper limbs in 2017

## Chest CT Scan

Peribronchovascular interstitial lung disease in the bilateral lower lobes.  
**Nodules** in The lateral segment of the middle lobe, Finely Irregular  
**Nodular** lesions in the mediobasal segment of the right lower lobe.

## Laboratory Test

Modest complement consumption,  
**negative ANCA**, and **ANA positivity** (1:160)

**ANCA-negative  
Granulomatosis with  
Polyangiitis (GPA)**

History of Arthritis

Joint pain

**Secukinumab**  
+  
steroid tapering

## RESULTS AND CONCLUSIONS:

Identifying a single therapeutic target capable of modulating multiple clinical manifestations is of clinical relevance.

The TH17 pathway seems to be involved in the pathophysiology of both granulomatosis with polyangiitis (GPA) and inflammatory arthritis

The use of IL-17 inhibitors has shown efficacy in maintaining GPA remission as well as in controlling articular symptoms