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AVACOPAN IN MPO-ANCA VASCULITIS: WHEN CORTICOSTEROIDS CAN NOT BE THE LONG TERM ANSWER

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Introduction

ANCA associated vasculitis is a severe form of necrotizing vasculitis affecting mainly small vessels. MPO-ANCA is more common in **Southern Europe.**

Corticosteroids remain a cornerstone of both induction and maintenance treatment. They are associated with important side effects, such as immunosuppression, hypertension, glucose intolerance and others.

Avacopan, a complement C5a receptor inhibitor, has been recently proposed as an adjunctive agent that permits reduction or **avoidance of CCT.**

Case Report

76 year old man, with hypertension, dyslipidemia, HF with and AF permanent atrial fibrillation, normal renal function

No family history for renal diseases

Hospital admission

❌ No history of **macroscopic hematuria**, dysuria, pollakiuria, hemoptysis, edema, urinary tract infection, rash or petechia.

✅ Physical examination was unremarkable and blood pressure was controlled.

Kidney biopsy: **9 glomeruli-** 1 was globally sclerosed, 1 had segmental sclerosis and other had **extracapillary fibrocellular proliferation**. There was **focal periglomerulitis.** Tubular atrophy and fibrosis were present in less than 10% of the sample. Immunofluorescence was negative.

Main parameters	Results
Serum creatinine	2.52 mg/dl
Hemoglobin	11.2 g/dl
Urine protein to creatinine ratio	1,8 g/g
ANCA- MPO	654,2 UQ (N<20).
Kidney ultrasound	Normal sized kidneys

ANCA-MPO vasculitis was assumed, and induction treatment included three pulses of intravenous methylprednisolone plus rituximab (two 375mg/m2 weekly pulses) and maintenance oral prednisone was started (1 mg/kg/day),

✅ **Improved glomerular filtration rate and proteinuria remission.**

6 months later, **avacopan** was started in a dose of 30 mg twice daily and CCT were tapered over six weeks, in order to reduce CCT toxicity due to this patient cardiovascular profile.

6 months later

✅ Remains **asymptomatic**, **kidney function is stable** (sCr: 1.7 mg/dl), proteinuria is persistently less than 1g/g and MPO ANCAs are now 8,8 UQ.

Conclusions

Avacopan, as a C5aR is a new strategy to reduce drug side effects including CCT toxicity. Due to vasculitis incidence in older patients, these tend to have more **comorbidities** that may be aggravated with the current therapies, namely CCT.

This new drug has been used as an **alternative** in maintaining MPO-ANCA vasculitis remission, particularly in patients with an **increased risk of CCT toxicity** with several cardiovascular risk factors, which was successfully treated with this approach.