

WEGENER'S GRANULOMATOSIS IN A PATIENT WITH VITAMIN D DEFICIENCY

**P. Athanassiou, I. Kostoglou-Athanassiou, E. Xanthakou,
A. Papadaki, D. Basdragianni**

**Department of Rheumatology, St. Paul's Hospital,
Thessaloniki, Greece**

**Department of Endocrinology, Red Cross Hospital, Athens,
Greece
Endocrinologist**

Introduction

- **Wegener's granulomatosis is characterized by necrotizing granulomatous vasculitis**
- **It occurs initially in a localized form, disseminates in various degrees and particularly involves the respiratory tract and kidneys**
- **It is an ANCA-associated vasculitis, a systemic disease of autoimmune aetiology**
- **Recently vitamin D deficiency has been associated with the development of autoimmunity**

Aim

- The aim was to present a case of Wegener's granulomatosis in a patient with vitamin D deficiency induced by gastric surgery for the treatment of morbid obesity

Case Report

- A patient, female aged 47 years, presented with chronic episcleritis, conjunctivitis, retroorbital pain and erythema of the left eye over the course of 2 years
- The patient had had gastric surgery for the treatment of morbid obesity and had also been subjected to thyroidectomy for the treatment of a thyroid nodule
- On clinical examination she had a hemorrhagic rash over the lower extremities and bilateral hearing loss
- Laboratory investigations revealed vitamin D deficiency, 25(OH)D₃ levels being 11.7 ng/ml (normal levels >30 ng/ml), microscopic hematuria, proteinuria, and positive c-ANCA
- Imaging studies revealed the presence of nodules in the lungs and signs of left orbital inflammation

Case Report

- The diagnosis of Wegener's granulomatosis was made
- Intravenous methylprednisolone pulse therapy was initiated and vitamin D was administered orally with subsequent sustained improvement

Conclusion

- In conclusion, the case of a patient with Wegener's granulomatosis and vitamin D deficiency after gastric surgery for morbid obesity is presented
- Vitamin D deficiency is known to be associated with the development of systemic autoimmune diseases such as multiple sclerosis and rheumatoid arthritis
- Vitamin D deficiency induced by gastric surgery may be implicated in the pathogenesis of a systemic autoimmune disease with ocular manifestations in this patient