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## INTRODUCTION

➤ Immune suppressive patients due to any cause (disease, medication etc.) rarely have autoimmune diseases.

➤ In this presentation two patients diagnosed with Graves' disease and subacute thyroiditis while taking cyclosporine therapy will be discussed.

### CASE 1

➤ A 47 year-old female patient applied to outpatient clinic with weight loss, sweating and tremor which had been present for the last two months.

➤ She had been on cyclosporine therapy for three years because of hypoplastic anemia.

➤ Laboratory tests are listed in table 1.

➤ Thyroid ultrasound revealed enlarged thyroid gland with diffuse parenchymal heterogeneity.

➤ Patient's thyroid scan showed increased uptake which was diffuse and homogenous in pattern. (Picture 1)

➤ On 24-hour radioiodine uptake test 4th hour uptake was 46 % (15-25 %) and 24th hour uptake was 27 % (25-35 %).

➤ Based on these clinical and laboratory findings the patient was diagnosed as Graves' disease. With thiomazole therapy euthyroid state was achieved.

### CASE 2

➤ A 41 year-old female patient admitted to our clinic with pain and tenderness in the thyroid area.

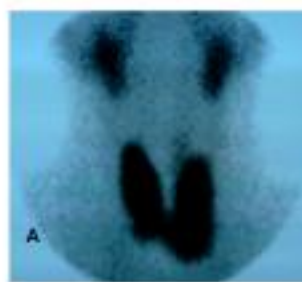
➤ She had been using cyclosporine during the last 2 year period for psoriasis.

➤ Laboratory tests are listed in table 1.

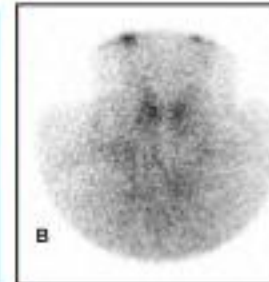
➤ Thyroid ultrasonography showed multiple hypoechoic thyroid nodules with ill-defined margins on the basis of chronic thyroiditis.

➤ In the thyroid scan there were suppressed areas in nodular pattern and a global nonhomogenous uptake. There was low radioiodine uptake in the 24-hour radioiodine uptake test. (Picture 2)

➤ The patient was diagnosed as subacute thyroiditis. Nonsteroidal anti inflammatory drug and beta blocker were given. One month later her thyroid function tests were within normal limits..



Picture 1



Picture 2

## CONCLUSION

➤ Cyclosporine is an immune-suppressive drug which is also used in the treatment of Graves' ophthalmopathy.

➤ Cyclosporine inhibits calcium, IL-3, IL-4 and IL-5 induced T and B lymphocyte proliferation and cytotoxic T cell egzocytosis but rarely it can be a cause of autoimmune disease by an unknown mechanism of abnormal modulation of the immune system.

➤ Patients taking cyclosporine especially those having another autoimmune disease or family history of thyroid disease must be carefully monitored with thyroid function tests.

|                       | Normal values   | Case 1 | Case 2 |
|-----------------------|-----------------|--------|--------|
| TSH                   | 0.27-4.2 uIU/ml | 0,01   | 0,015  |
| FT3                   | 1.8-4.6 pg/ml   | 28,56  | 3,92   |
| FT4                   | 0.9-1.7 ng/dl   | 7,77   | 1,48   |
| Anti-Tg               | 0 – 115 IU/mL   | 387,8  | 143,2  |
| Anti-TPO              | 0 – 34 IU/mL    | 35,2   | 9,7    |
| TSH Reseptor Antibody | 0 – 14 u/L      | 95,02  | 5      |
| RAI Uptake            | 4.hour %15-25   | 46     | 1      |
|                       | 24.hour %25-35  | 27     | 0      |