## **SUMMARY:**

Our results are summarized below:

- 1. Among DM and PM patients, we were most able to recognize malignant tumors in DM patients. Our results indicate that the predominance of female patients among PM/DM cases is lowered when PM/DM is also associated with tumors.
- 2. I was able to show, on the basis of the examinations, that in 64% of cases, the two diseases (tumor and myositis) occurred within one year. As a result, it is important to screen myositis patients for tumors at the time of myositis diagnosis, and continue to monitor patients for the duration of at least one year from the time of myositis discovery. I concluded that the risk of tumor and mysotis association is greatest in the first year, but may occur over 3 years. Tumor symptoms are sometimes recognized first, and in these cases, the risk of myositis is greatest within 1.5 years of diagnosis.
- Our studies indicate that the most frequent variety of tumor assocated with DM
  occurs in the breasts, lungs, and GI tract. Histologically, the most frequent form
  was adenocarcinoma.
- 4. I brought attention to the fact that clinical research shows that specific to TTM cases are occurrence of serious skin symptoms and frequent ulcerations and skin itching. Muscle weakness is common in both groups, but distal muscle weakness also occurs and is more frequent in the TTM group and it seriously affects muscles of respiration. Arthritis, arthralgia, Raynaud's syndrome, fever, cardiac

- manifestations and ILD symptoms were less frequently encountered to be associated with primary myositis.
- 5. Laboratory examinations indicated that only CK and LDH levels raised in active development of myositis, and were less indicative of tumor associations. CK and LDH values showed significant drops one month after successful tumor removal, which indicates paraneoplastic origins. Immunoserological value changes and myositis specific antibodies occur chiefly in cases of primary myositis. My results indicate that tumor markers are not useful for occult tumor screenings.
- 6. We concluded, using genetic examinations, that HLA DRB1\*0301 and 01 alleles have a preventative effect, while HLA DQB1\*03 gene domination is evident in cases of tumor association. We found that the entire myositis population is dominated by DQA1\*01 and \*05 genes.
- 7. Analysing the therapuetic specificities I noted that after initial aggressive steroid treatments, myositis associated tumors were frequently in need of immunosuppresants, IVIG and plasmapheresis treatments.
- 8. I concluded that timely diagnosis of of tumors is of utmost importance. In 78% cases of direct oncological treatments; successful surgery, radiological therapy, and chemotherapy resulted in the improvement of myositis symptoms. I proved that our TTM patients' life expectancy declined compared to primary cases, but were much improved compared to previously published expectancies, which was explained by the training our clinic has had due to our frequent encounters with myositis patients, early tumor recognition, and referral to oncology departments.

9. Based on previously published data, I classified rheumatological types' associated paraneoplastic syndromes, highliting those symptom groups which suggest occult tumor occurances and thus indicate tumor screenings.