Demodicidosis and its Therapy

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As is generally known, demodicidosis occurs in dogs and may cause death. A miniature pincher whose face skin follicles were full of demodex-mites was treated with aminopterine. During treatment we followed the behaviour of the demodex, whose activity decreased in the course of a few days, until no mites were left in the follicles. The hair growth on the head was completely restored.

In November 1965, I saw a 56-year-old female patient with rosacea-type patches in the face. She had had these since her forty-fifth year, localised all over face and neck. The patches consisted of erythematous follicular papillae, sometimes crusty or scaly, with some pustulae here and there. After considering the possibility of tuberculosis papulo-necrotica rosaceiformis of Lewandowsky, demodicidosis was suggested. Several demodex-mites could be demonstrated in the horny plug and the detritus, by pressure with a blackhead squeezer.

With the object of starting methotrexate therapy, the patient was examined by an internist. From the anamnesis it appeared that she was thirsty. She had a brother who had been a diabetic patient for fifteen years. A pathological glucose tolerance curve was found with a fasting value of 1.41 g/l and, after that, 2.13, 2.64, 2.68, 1.99 and 1.50 g/l, respectively. Urine-portion two hours after glucose was weak positive. The blood picture, liver function tests, protein spectrum and kidney function were normal. The patient was put on a diet and was given rastinon. Lotio Kummerfeldi with 3% ichthyol was applied locally. After two month’s treatment, the redness had slightly lessened. There was still a large number of follicular erythematous papillae and some pustulae, in which demodex-mites were always found. The patient was then hospitalised for treatment with methotrexate. After a diet with two rastinon tablets, the daily curve was normal. From the 6th day the patient was given one 2.5 mg methotrexate tablet twice a day. After 23 days, the follicular papillae in the face had practically disappeared and no more demodex-mites were found.

Three months later however, she came back with the same complaints in the central part of the face, in the form of several erythematous papulae and some pustulae. Again some demodex mites were found. The patient was now given one methotrexate tablet a day for one week. After a week’s rest, this dosage was repeated in the same way as is usual in cases of psoriasis.

The treatment was continued for some weeks, with regular checking of the blood picture. Eventually the rash and the demodex disappeared. For five months now the complaints have not come back. The rash in face and neck has completely disappeared, with the exception of a few papular elements.
Our next patient was a 61-year-old woman with a face rash which had started 8 years ago. The rash had started on the nose. In March 1966, it had spread to cheeks and forehead. There were no subjective complaints, only cosmetic. Patient’s mother was reported to have suffered from the same affection. She, and patient’s brother had been diabetic patients. On her father’s side there was one sister with diabetes. Here again a strong hereditary condition. The patient herself had no diabetic complaints and the GTT was normal. Blood, liver and kidneys showed no abnormalities. Methotrexate therapy was started. With the experiences of our first patient in mind, we gave her one tablet a day over a longer period. Our present patient was given 40 tablets in all, with constant checking of the blood. For three months now, no more demodex-mites have been found and the skin rash has disappeared. In the case of this patient, a special mention should be made of the fact that for 25 years she had never used soap and water on her face, as these were supposed to be harmful to the skin. During therapy our patient did not use soap and water either. The cases described here would lead to the assumption that a certain constitution is a favourable condition for the development of demodex-mites.