Canine demodicosis is an inflammatory parasitic skin disease, and may be manifested in many forms. This acarisis is an important source of study for biological, immunological and clinical-pathological aspects.

Since *Demodex canis* is a species of mite able to enter the internal organs of its host, that can be considered a model for the research on demodectic mange. Moreover, canine demodicosis can become a severe skin disease if diagnosis is not made precociously and can terminate fatally. On the other hand, it is possible that lots of dogs have this parasite in a quiescent or, anyhow, not pathogenic form.

Therefore we have tried a preliminary survey on 10 dogs, 5 males and 5 females, some of which brothers, infested by *Demodex canis*. We have examined the lesions produced by the mites in the different cutaneous areas and in the extracutaneous sites.

The study has pointed out some aspects of the acarisis:

1) Perifolliculitis, folliculitis and furunculosis as different stages of follicular parasited;

2) Presence of granulomas or/and pyogranulomas forms in periannexal areas of the dermis;

3) Presence of Staphylococci and fungi at different levels of the skin;

4) Presence of *Demodex canis* in extracutaneous sites.

The results of the study allow to formulate some hypotheses on the evolution and the pathogenesis of the acarisis.