

## DEMODICIDOSIS INVOLVING HUMAN FACE<sup>o</sup>

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### Summary

From the face of each of nine patients having rosacea-like lesions the follicle mites identified as *Demodex folliculorum* (DF) (Simon) were isolated in varying numbers. In our control cases no mites were demonstrated from similar sites. Treatment with one percent lindane (Cosmascab lotion-Napha) applied locally for seven consecutive days improved the condition in all patients.

*Demodex folliculorum*, commonly known as follicle mite inhabits the hair follicles and sebaceous glands particularly around the nose and eyes. It has been recognised as a parasite of human beings in all parts of the globe. Does this follicle mite play any role in the etiology of any skin disease? It is still an unsolved question. Some believe in its etiological role and some others do not.

Relationship between these mites and acne, blepharitis, pityriasis rosacea<sup>1,2</sup> acne rosacea, pityriasis alba<sup>3</sup>, alopecia<sup>4</sup> eye irritation<sup>5</sup>, scaly disorders of skin<sup>6,7,8</sup> naevus and epithelioma<sup>9</sup> have all been reported.

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Recently certain cases, attending our skin O.P.D. and having rosacea-like lesions on nose, sides of nose, lips, cheeks and chin attracted our attention. As the areas involved are also the favourite sites of lodgement of demodex folliculorum suspicion regarding their etiological role in these conditions arose in our minds.

### Material and Methods

Scrapings from the affected areas of 9 patients with rosacea like lesions were taken on glass slides mounted separately in Berlese's fluid and examined carefully under light microscopy, to detect the presence of any mite. The number of mites per slide, if any, was noted. From 11 normal persons (control) scrapings from similar spots were examined.

### Results and discussion

From the affected sites of each of the nine patients *Demodex folliculorum* (Simon) mites were detected. The number of mites per slide varied from 1-18. From 11 normal persons no mite was recovered.

*Demodex folliculorum* was discovered independently by Henle<sup>10</sup> and Berger<sup>11</sup> in 1842. Simon<sup>12</sup> described it as *Acarus*

folliculorum. Owen<sup>13</sup> reevaluated the genus as *Demodex*. According to Akbulatova<sup>14</sup> there are two subspecies of the mite; namely *DF longus* and *DF brevis*. Desch and Nutting<sup>15</sup> however proposed the name *Demodex folliculorum* (Simon) and *Demodex brevis* (Akbulatova) respectively for those two subspecies.

The measurements of all the mites of the present series tallied with those of *D. folliculorum* (Simon)<sup>16</sup>. It is of interest to note that no *D. brevis* (Akbulatova) was detected from our patients. In this connection it is pertinent to mention that it is neither fully confirmed, nor denied that there are two distinct demodicid species inhabiting the skin of man<sup>17</sup>.

Some workers, as stated earlier, do believe that DF can cause some skin trouble. Others do not believe so. According to Gmeiner<sup>18</sup> in a wide range of skin diseases, these mites are no more numerous in the lesions than elsewhere in the same host. Workers like Ayres and Mihan<sup>5</sup> believe that the aetiological significance of DF is not based on its mere presence, but on quantitative considerations.

Detection of mites in the present series of cases presenting rosacea like lesions is very striking. Age of these patients varied from 15-32 years. Out of 9 patients, 6 were males.

Scrapings from similar sites from control group did not reveal any DF. But their presence in normal skin has been reported by other workers. It is then possible that in some persons due to some unknown reasons the mites create hypersensitive reactions and pathological lesions.

It is also interesting to note that when 1% lindane lotion was applied once daily for seven consecutive days, the skin lesions improved. Probability exists that after discontinuation of the

treatment, mites may reappear and skin lesions recur.

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## Announcement

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