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## Response of skin fungal infections to cold atmospheric plasma treatment

Dheerawan BOONYAWAN<sup>1</sup> and Chanchai CHUTSIRIMONGKOL, MD.<sup>2</sup>

<sup>1</sup> *Physics & Materials Science, Chiang Mai University, Thailand*

<sup>2</sup> *Photo Bio Care Co. Ltd., Thailand*

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The clinical observation was to determine the effect of cold atmospheric plasma treatments on patients with skin fungal infection. The treatments were carried out by using BioPlasma® system for 30 minutes per session. BioPlasma® system is a rounded-floating electrode-DBD type. It was set to 05/50 per one full face treatment once weekly to once every 3 weeks. The output power measurement from the electrode at this setting is about 0.6 W/cm<sup>2</sup>. Constant flow of microfilament air plasma is noted between the electrode tip and skin surface uniformly.

All patients were recommended for the plasma treatment only if they were unsuccessfully treated by standard methods using topical and oral antifungal drugs. The patients can notice improvement after 2 treatment sessions and get significant improvement after 4-6 sessions. The treatment must be done regularly for 3-6 months depending on the severity of the infection and the patients' skin conditions.

Fig.1 The rounded-floating electrode-DBD plasma, in direct contact with skin.

