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**Original article:**

**High resolution ultrasonography in dermatology; a psoriasis experience**

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**Abstract:**

**Context:** Ultrasonography has been increasingly used in dermatology as in inflammatory diseases like psoriasis as a tool for evaluation. Psoriasis is a common chronic inflammatory disease of the skin characterized by the presence of erythematous plaques. Severity of the psoriasis is determined by the area of involvement, intensity of the inflammation and elevation of the plaques. High-resolution variable frequency ultrasound imaging can be used increasingly for noninvasive objective evaluation of psoriasis lesions.

**Methodology:** This is a cross sectional study; 30 patients with plaque type of psoriasis diagnosed in Department of Dermatology were included in the study. These patients previously did not receive any topical medications for at least one month and were not on any systemic medications for the past three months.

**Results**: Healthy skin: Ultrasonography of the normal skin showed epidermis as a thin continuous hyperechoic with uniform thickness. The dermis appears comparatively less echoic, with uniform thickness, whereas the subcutaneous adipose tissue is characteristically hypoechoic separated by fibrous septa of connective tissue.Psoriatic plaques:

**Conclusion:** High-resolution gray scale sonography with power Doppler imaging is a real-time, easily available, cost-effective and noninvasive imaging technique that can be used for assessing activity and treatment response of psoriasis. It has already been used in the evaluation of many dermatological conditions, and the skin images are obtained in a noninvasive, reproducible and quantitative manner.

**Key words:** Power Doppler, High-resolution ultrasound, Skin, Psoriasis.