



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

THE ROLE OF ULTRA HIGH FREQUENCY ULTRASOUND IN HIDRADENITIS SUPPURATIVA: WHAT'S NEW?

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Introduction: Hidradenitis Suppurativa (HS) is a chronic, recurrent, inflammatory, disabling skin disease, which primarily involves the hair follicle. An ultrasound staging (SOS-HS) using 20 MHz probe high-frequency ultrasound (HFUS) has been proposed, mainly considering the presence of lesions that can potentially change the management of patients.

Objective: The goal of this study is to analyze the HS lesions by HFUS with MyLab™ Touch (Esaote, Genova, Italia), and ultra high-frequency ultrasound (UHFUS) with Vevo®MD (Visualsonics, Toronto, Canada), and compare the B-mode acquisitions with the different probes.

Materials and methods: We retrospectively evaluated 50 HS patients (32 female and 18 males, aged from 12 to 68 years-old) during the period between July 2016 and August 2017, who underwent HFUS and UHFUS of cutaneous and subcutaneous tissue. The patients were assessed by an experienced team composed by two dermatologists and one radiologist with HFUS using MyLab™ Touch (Esaote, Genova, Italia) equipped with a 20 MHz linear probe and UHFUS using Vevo®MD (Visualsonics, Toronto, Canada), equipped with two linear probes, up to 70 and 48 MHz.

Results: A total of 116 lesions were observed, of which 66 were fluid collections, 32 were tunnel, 6 pseudocysts, 5 bridge scars, 5 tombstones and 2 granulation tissue. The UHFUS allowed us to better distinguish the presence of structures already described with HFUS and to observe small structures, not previously described to our knowledge.

Conclusions: UHFUS is a very promising diagnostic method in HS, as it was demonstrated in our study, it allows the identification of previously unobservable findings thanks to the greater axial and lateral resolution.

