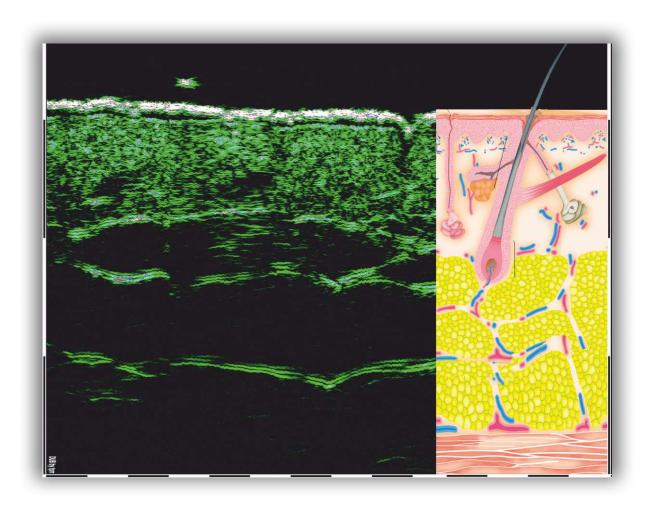
High Frequency Ultrasound



Fields of Application



Dermatology

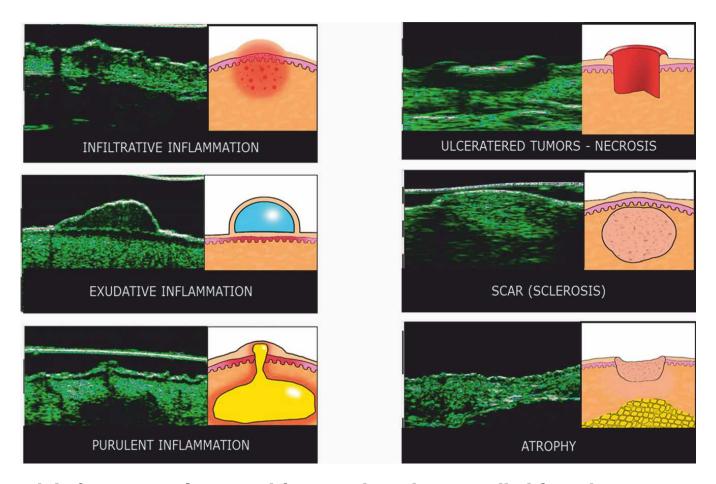
&

Aesthetics





Skin lesions structure visualization Pathology type differentiation



High-frequency ultrasound features have been studied for primary and secondary elements of the skin rashes.

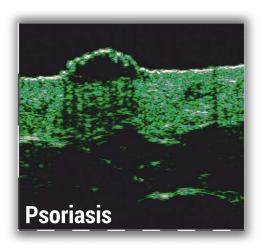
Specific high-frequency ultrasound patterns well described for infiltrative inflammation, exudative inflammation, purulent inflammation, necrosis, fibrosis, atrophy, cicatricial changes and others.

That helps to differentiate various skin diseases.





Dermatoses differential diagnosis











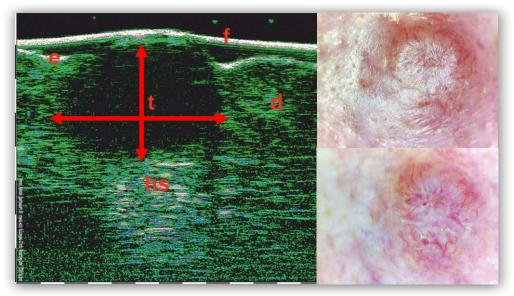


All scans taken with 75 MHz

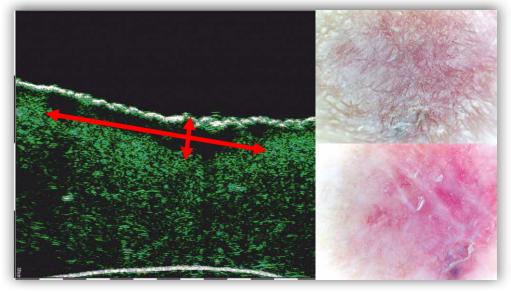




Skin tumors invasion depth measurement, and resection volume determination



Nodular BCC (depth 2,9 mm, widths 7,1 mm)

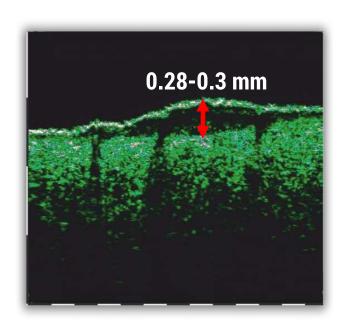


Superficial BCC (depth 0,4 mm, widths 9,2 mm)

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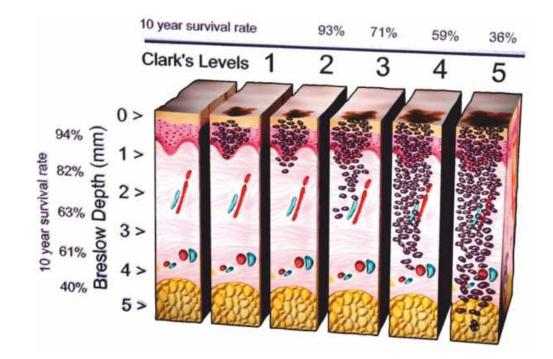
Melanoma Breslow and Clark index in vivo HFUS determination



Melanoma scan 75 MHz, hypoanechoic tumor 11 mm x 300 μ m, depth 140-190 μ m from the skin surface

BRESLOW INDEX - 0 (melanoma thickness 0.28-0.3 mm)

CLARK LEVEL - 2 (penetration into the papillary dermis layer)

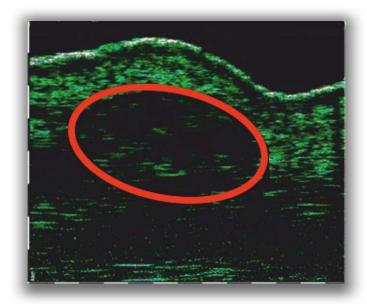


Aesthetics

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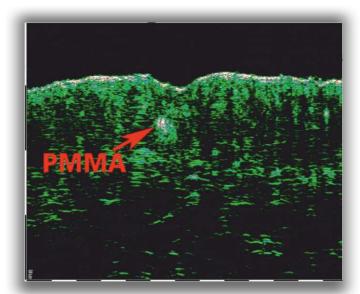
Filler detection & type determination



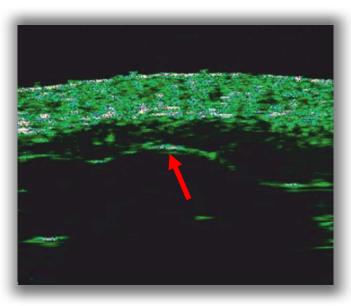
Hyaluronic acid in the upper lip columns



Polyacrylamide gel injected into the nasolabial fold



PMMA - permanent filler. Intradermal hyperechoic areas along the wrinkle



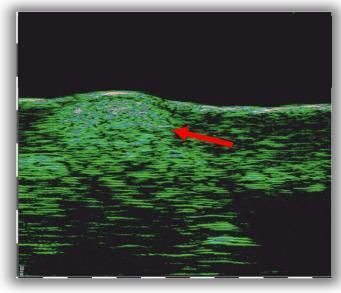
Aptos Nanovitis, scan after 6 months

Aesthetics

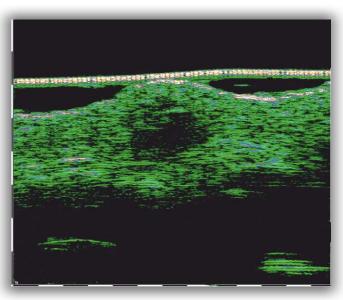
Page 7



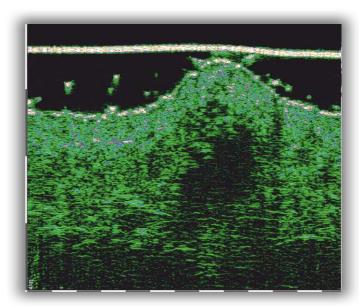
Filler complications visualization



Fibrosis after HA, as a result of hypercorrection



Complication after filler Injection. Granuloma



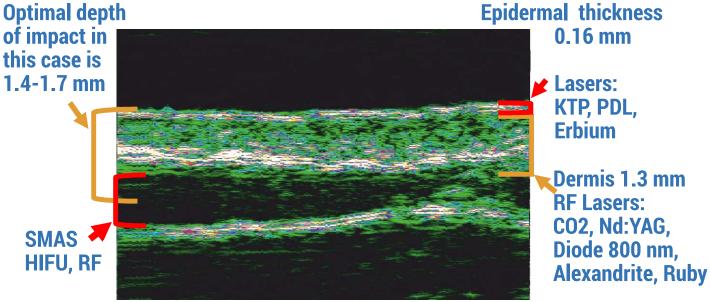
Complication - stabilized HA migration in the nasolabial fold



A piece of thread in a longpersistent inflammation focus



EBD devices targeting



Treatment efficacy control

