


ABSolu

Our new high-end ultrasound platform



- 
1. Device introduction
 2. User's feedback & Clinical application
 3. Conclusion



The best images ever !

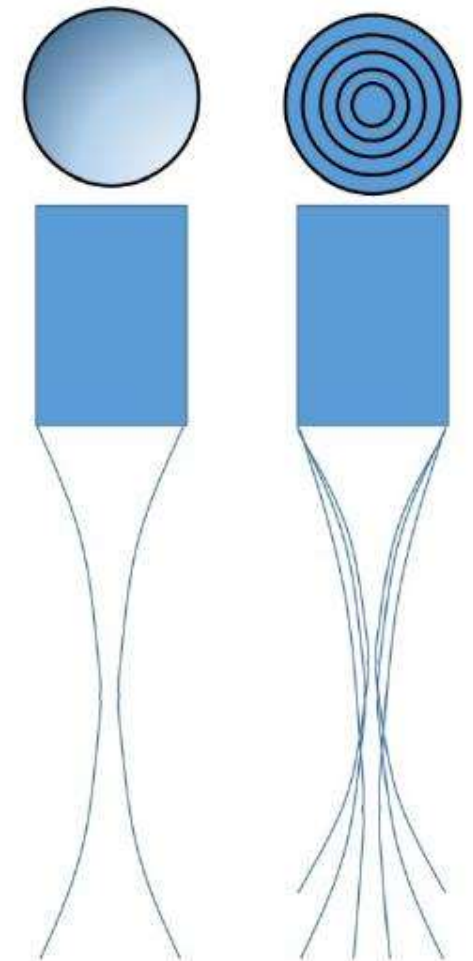
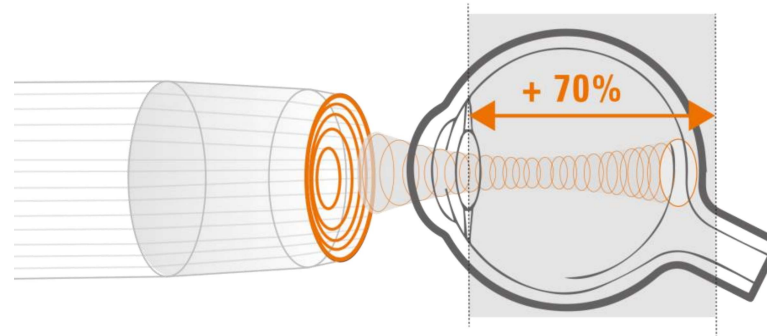


Best image quality ever

Anular B20 MHz probe

Which is composed of:

- ◆ 5 transducers (instead of 1)
- ◆ Ring shaped, concentric
- ◆ Successively emitting/ receiving the US waves
- ◆ Form a larger transducer (+20%)
- ◆ Same probe's size

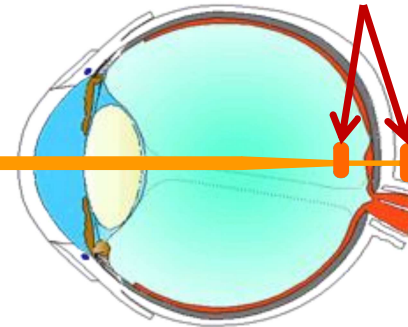


Best image quality ever

**B Probe standard (20 MHz)
with 1 transducer**



Zone de focalisation sur cette partie

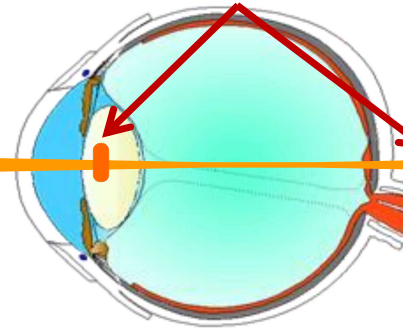


Balayage avec 1 faisceau

**B Probe annular (20 MHz)
with 5 transducers**



Zone de focalisation élargie

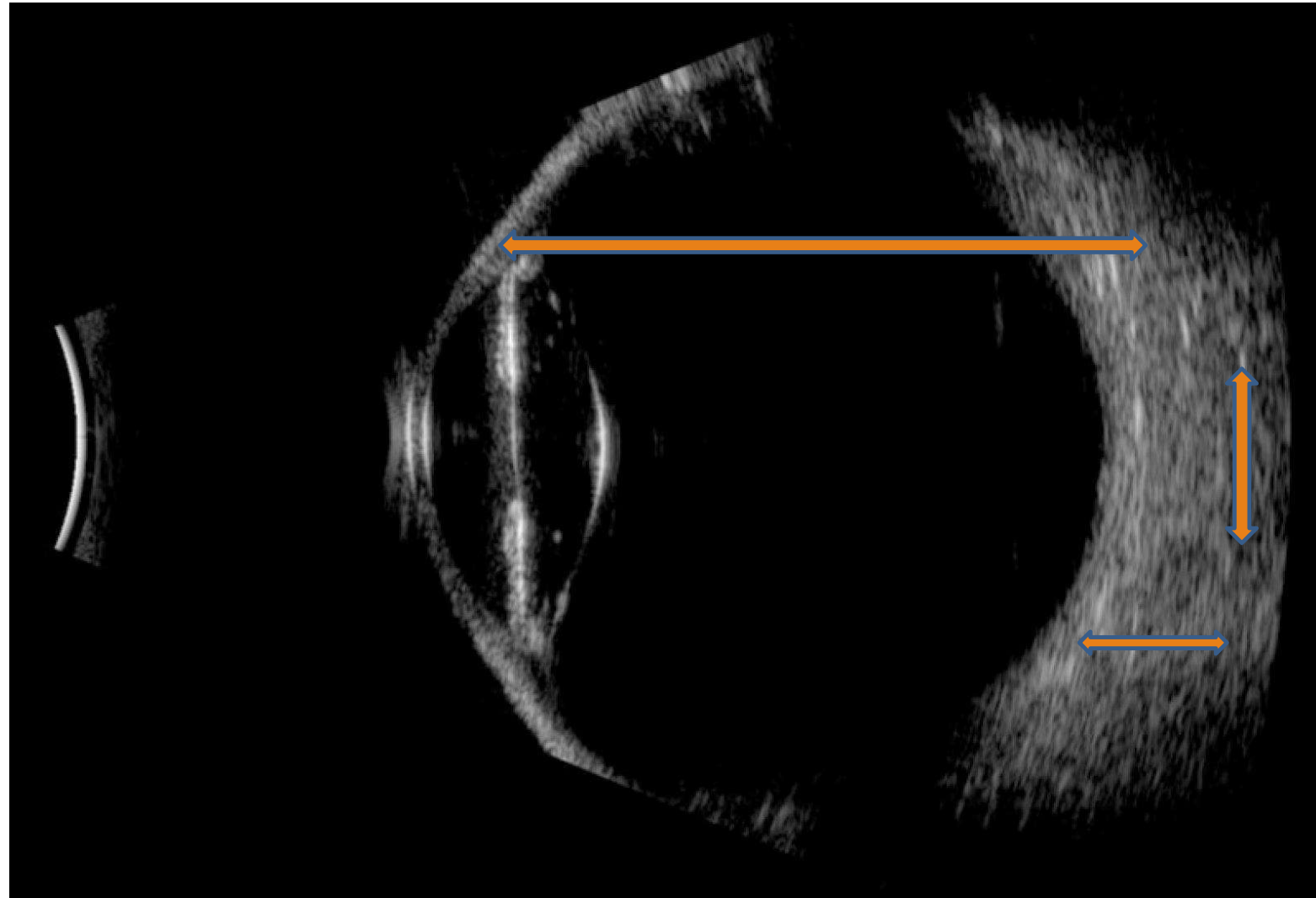


Balayage avec 5 faisceaux

3 Focal options: Eye, Vitreous, Retina

Best image quality ever

- ◆ Depth of field increased (70%)
- ◆ Lateral resolution increased (27%)
- ◆ Same axial resolution



Best image quality ever

➤ One probe to cover every diagnosis, with an image quality never reached

B15 – Over the eyelid



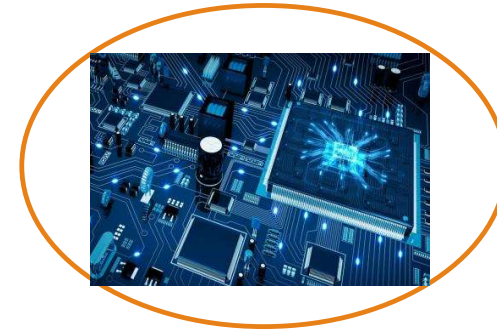
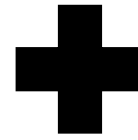
An improved resolution over a large area

- Outperforms our B15 on the vitreous
- Outperforms our B20 mono-element on the Retina/Orbit

B20-5 Annular – Over the eyelid



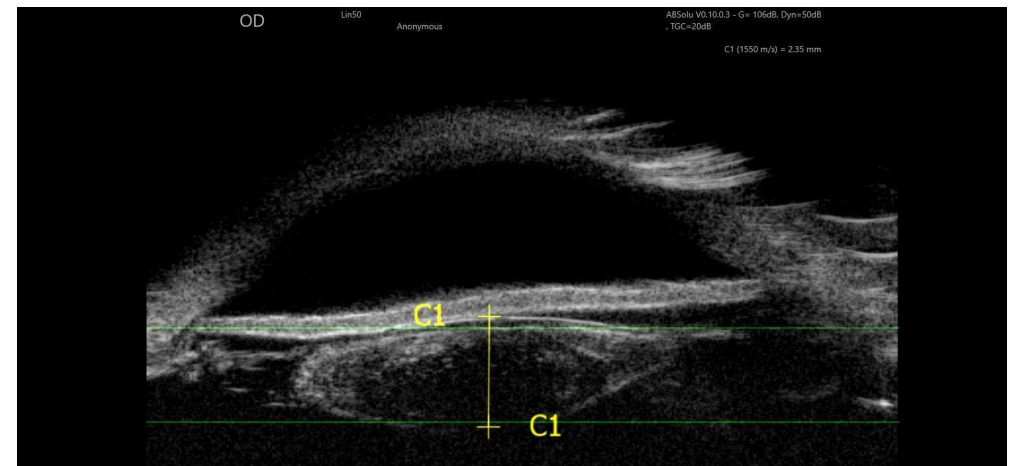
Best image quality ever



◆ UBM probe

◆ Huge engineering and signal processing progress

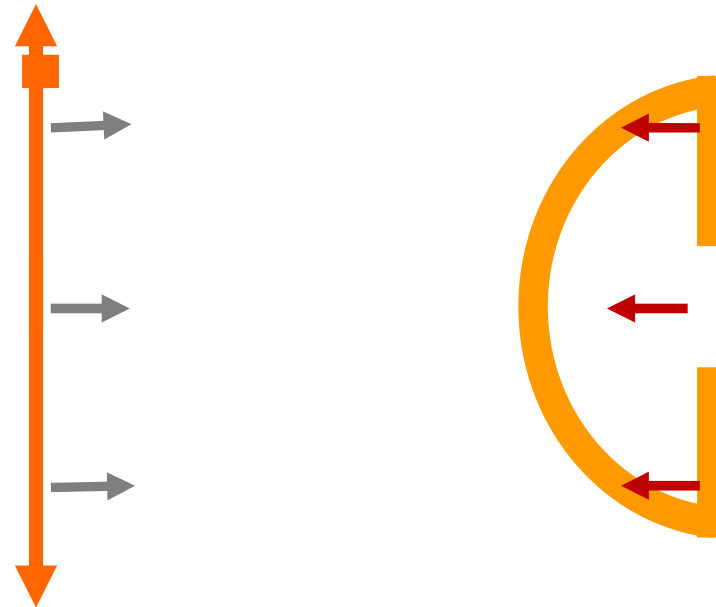
- ◆ Increased penetration while maintaining a high resolution
- ◆ Increased of Signal/Noise for a better visualization



Best image quality ever

Why linear in anterior segment imaging?

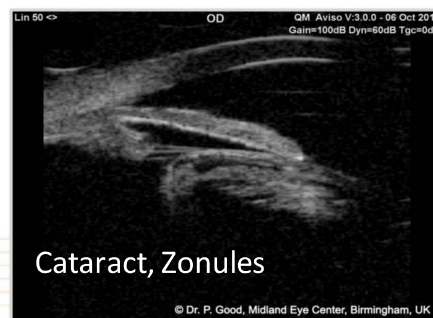
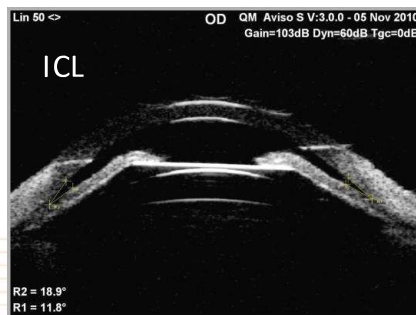
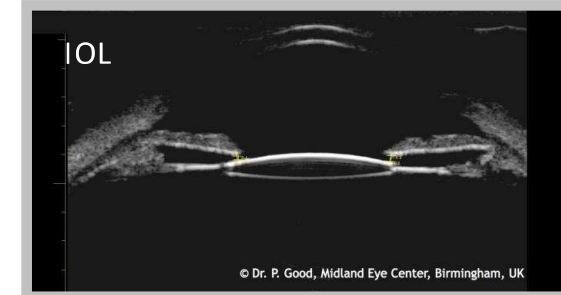
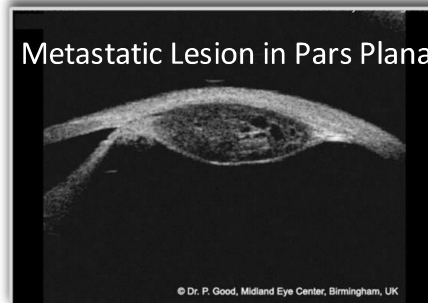
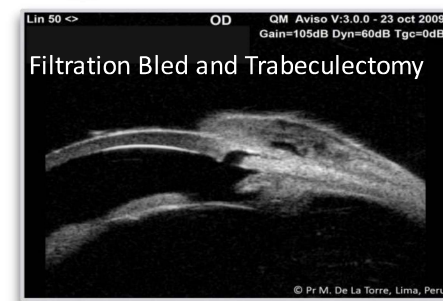
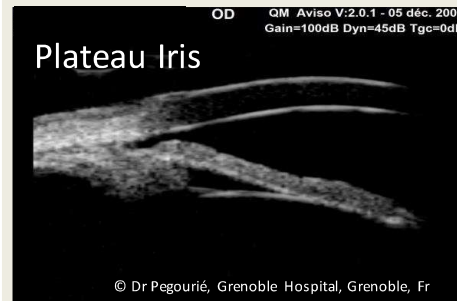
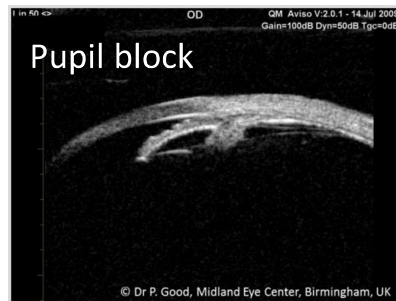
Linear technology



Linear = enhance image quality

Best image quality ever

A UBM Cutting-Edge





Exclusive technology



Exclusive technology

Accelerometers for B & UBM probes

The probe's position is recognised

The ultrasound beam direction is recognised

- Allow to follow a pre-saved protocole



Exclusive technology

Accelerometers for B & UBM probes

- The probe's position is recognised
- Allows to follow a pre-saved protocole

GENERAL SETUP

B - Protocol Settings

PROBE LABELING SETTINGS

Probe Labelling, Displayed By Default:

Probe Labeling Order for Posterior Pole (as B10, HF-P probe): LTA

Probe Labeling Order for Anterior Pole (as Lx50 Probe): LTA

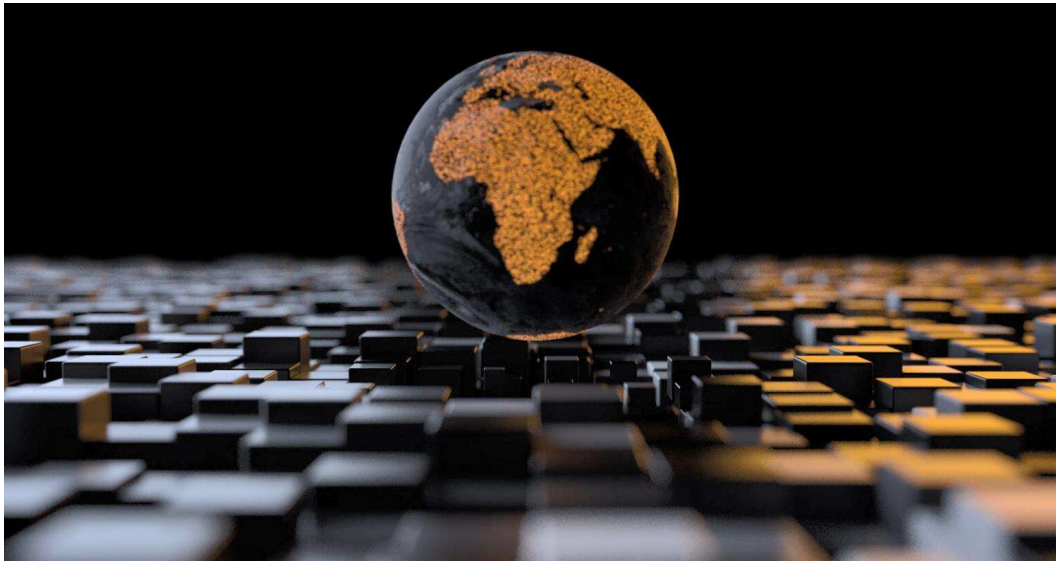
PROTOCOL SETTINGS

Protocol Name	Probe	Seq. #1	Seq. #2	Seq. #3	Seq. #4	Seq. #5	Seq. #6	Seq. #7	Seq. #8	Seq.
New Protocol	B20	T 11:30	T 11:00	T 10:30	T 10:00	T 09:30	T 09:00			
Protocol 01	B10	L 01:00 On	L 02:00	L 03:00 On	L 04:00	L 05:00 On	L 06:00			

Calibrated screen

Very first US platform featuring a Dicom display (Imaging standard in Radiology)

- Process which standardise the image / Contrasts, grey levels



- Image quality improved
- Easier diagnostic
- Standardised screen
 - Same image worldwide



What does that bring on a clinical
point of view?





Dr Peter GOOD
Birmingham Midland Eye center

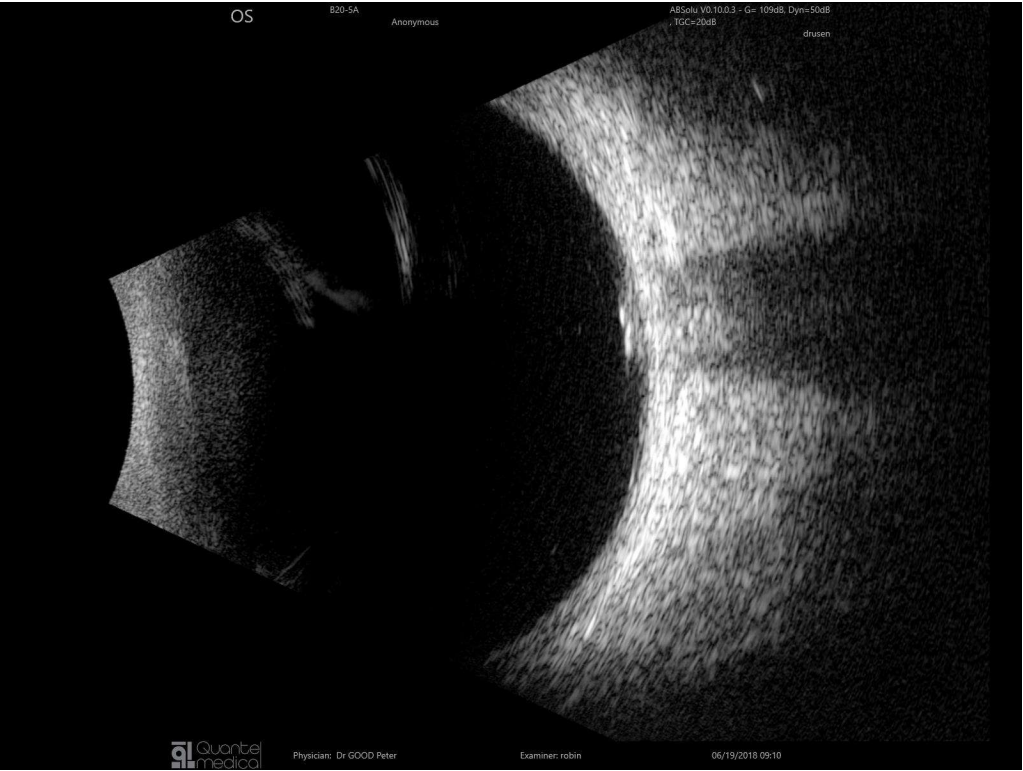
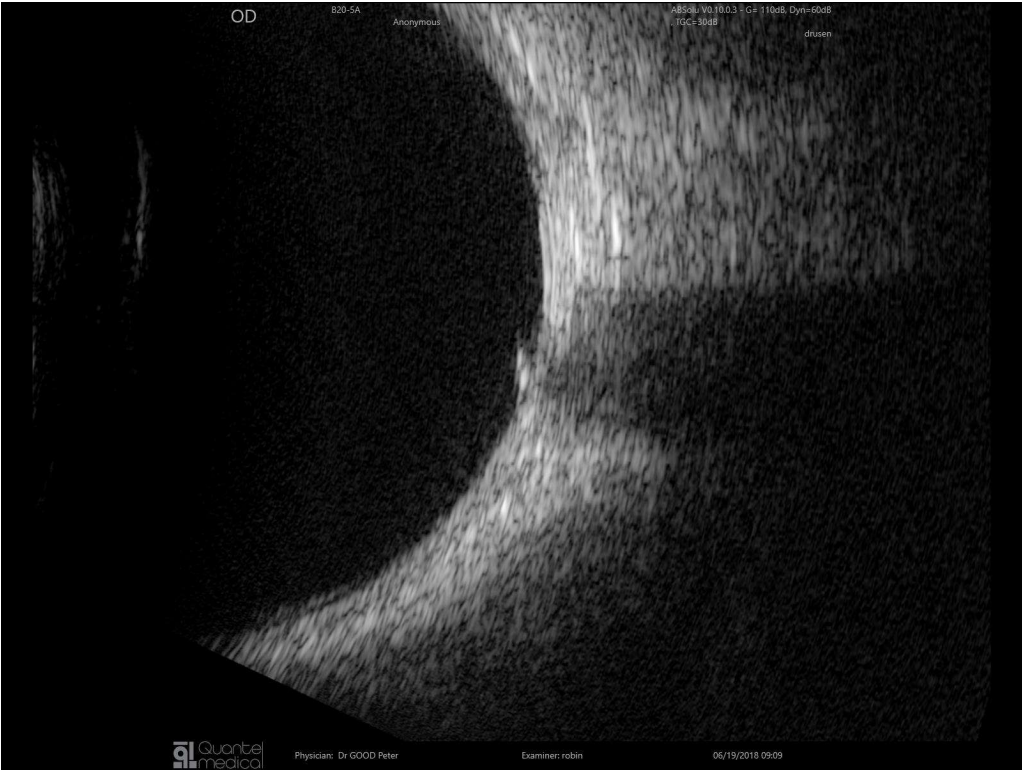




B15 and B20-5MHz probes



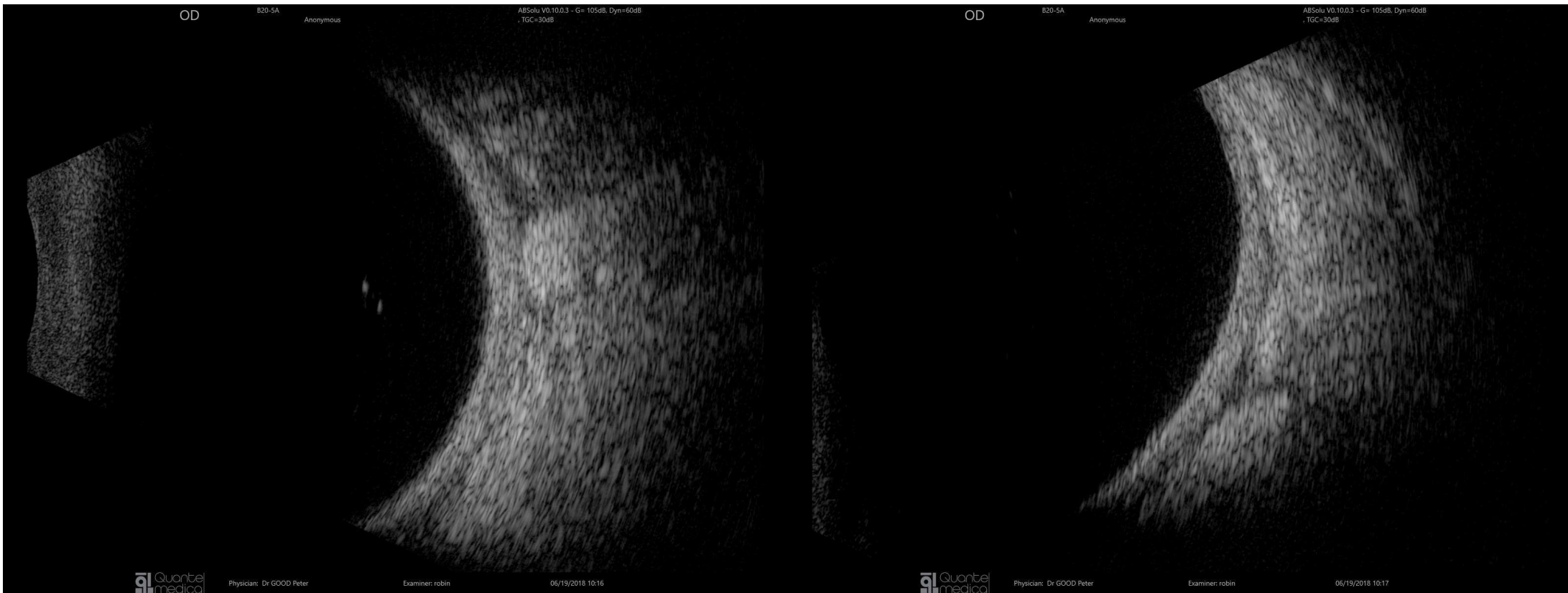
Buried optic disc drusen



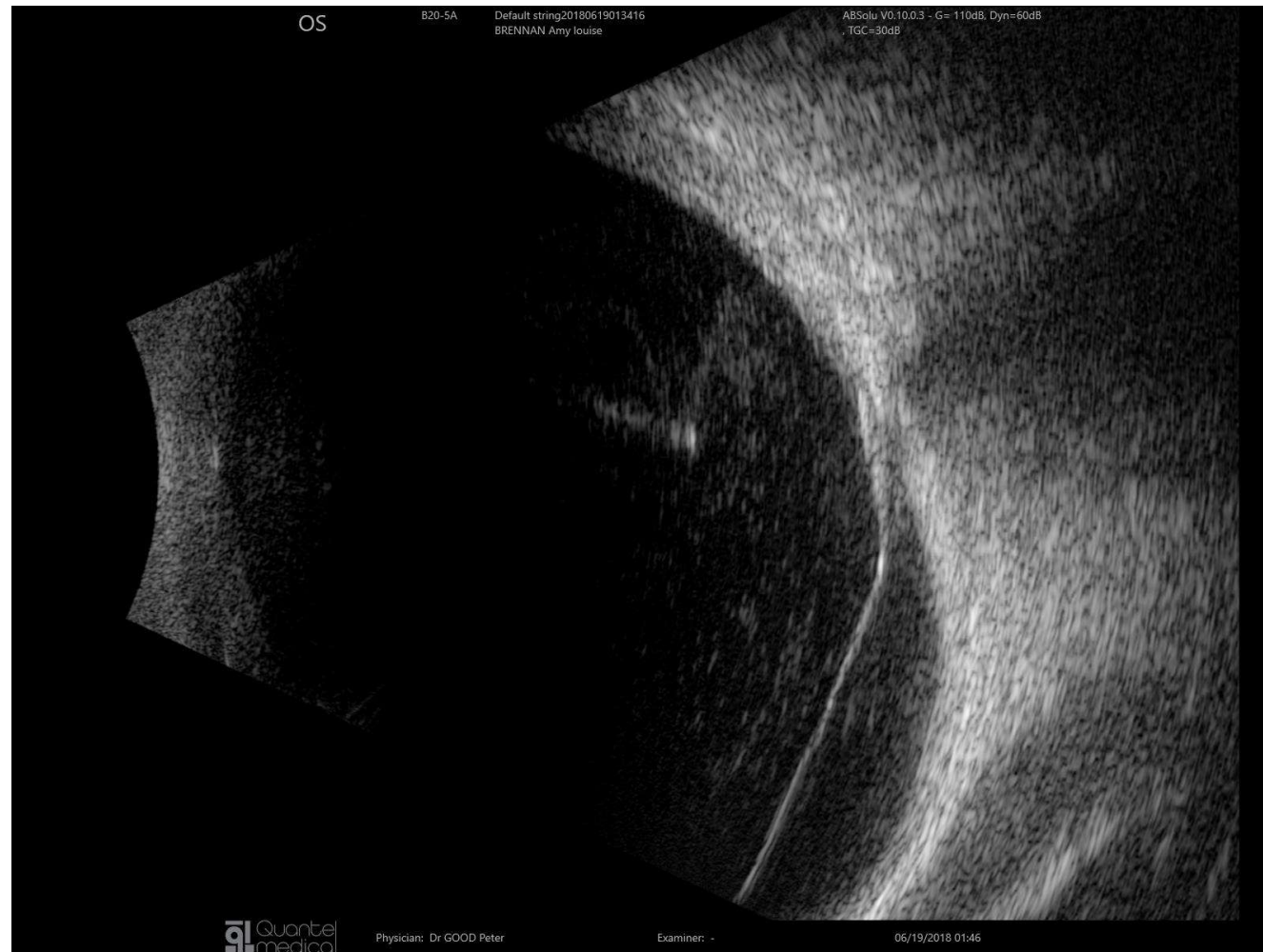
Small choroidal haemangioma



Orbital inflammatory tumour. 20 MHz probe shows excellent penetration within the orbit

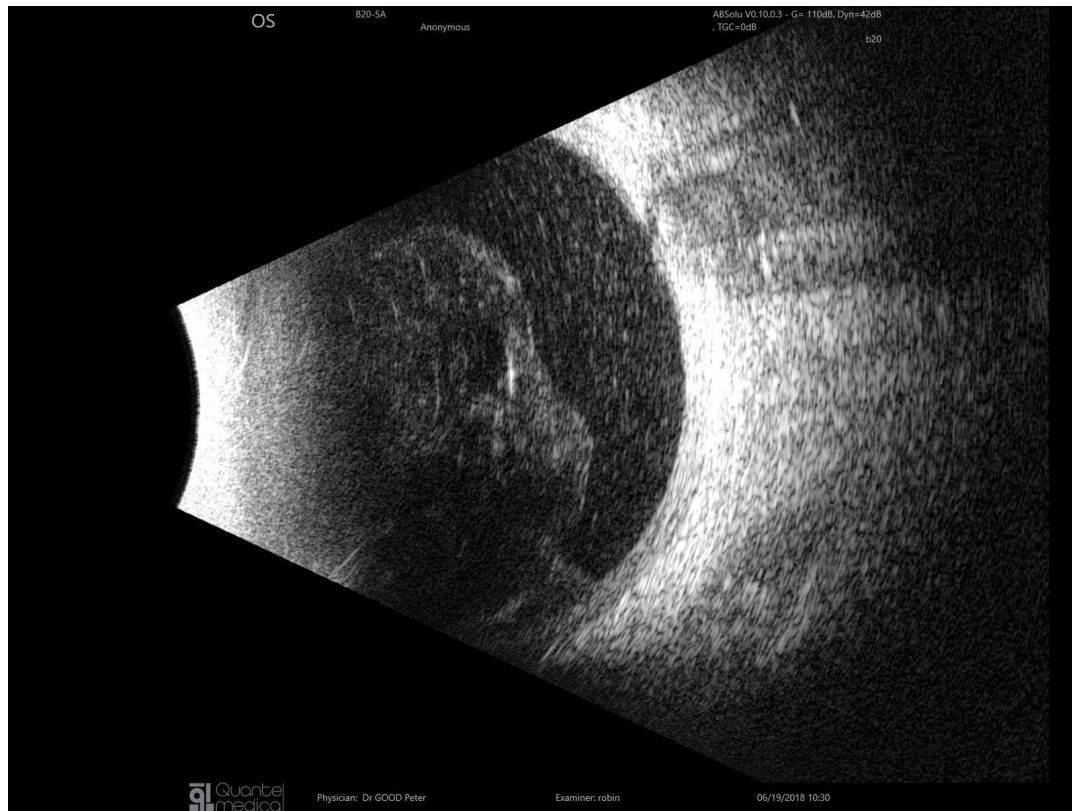


Detailed vitreous image showing vitreoretinal traction

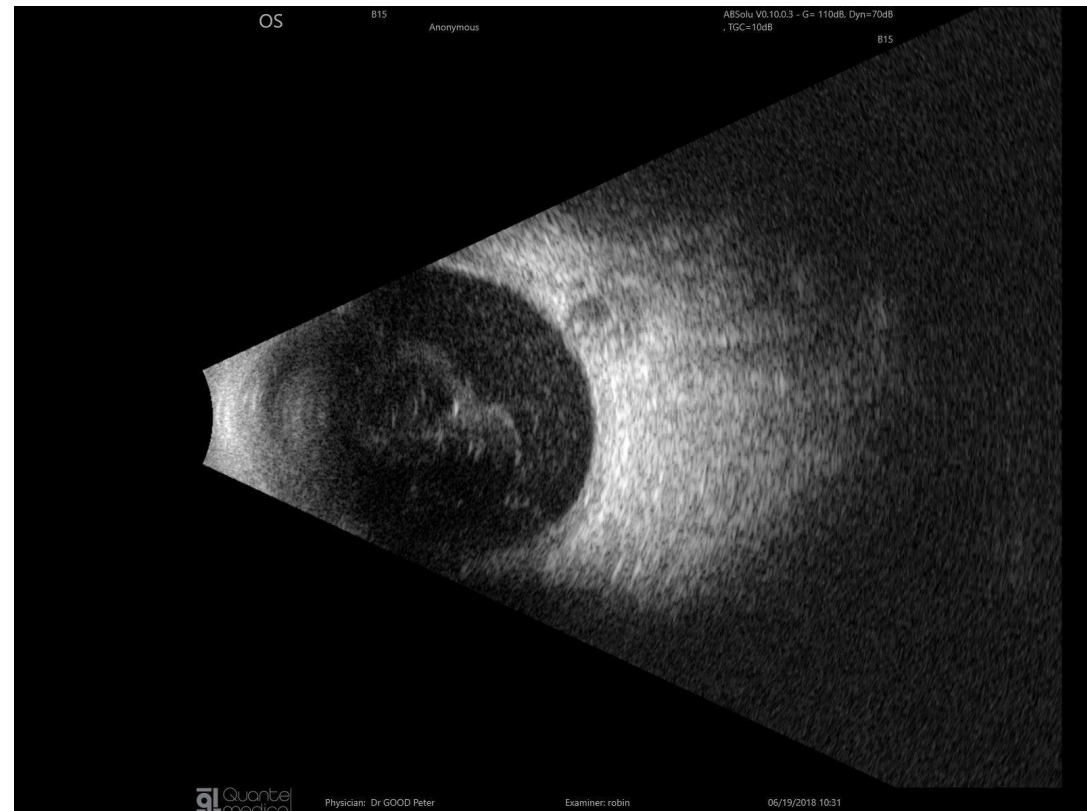


Comparison between 20 MHz and 15 MHz probes for vitreous haemorrhage

- 20 MHz



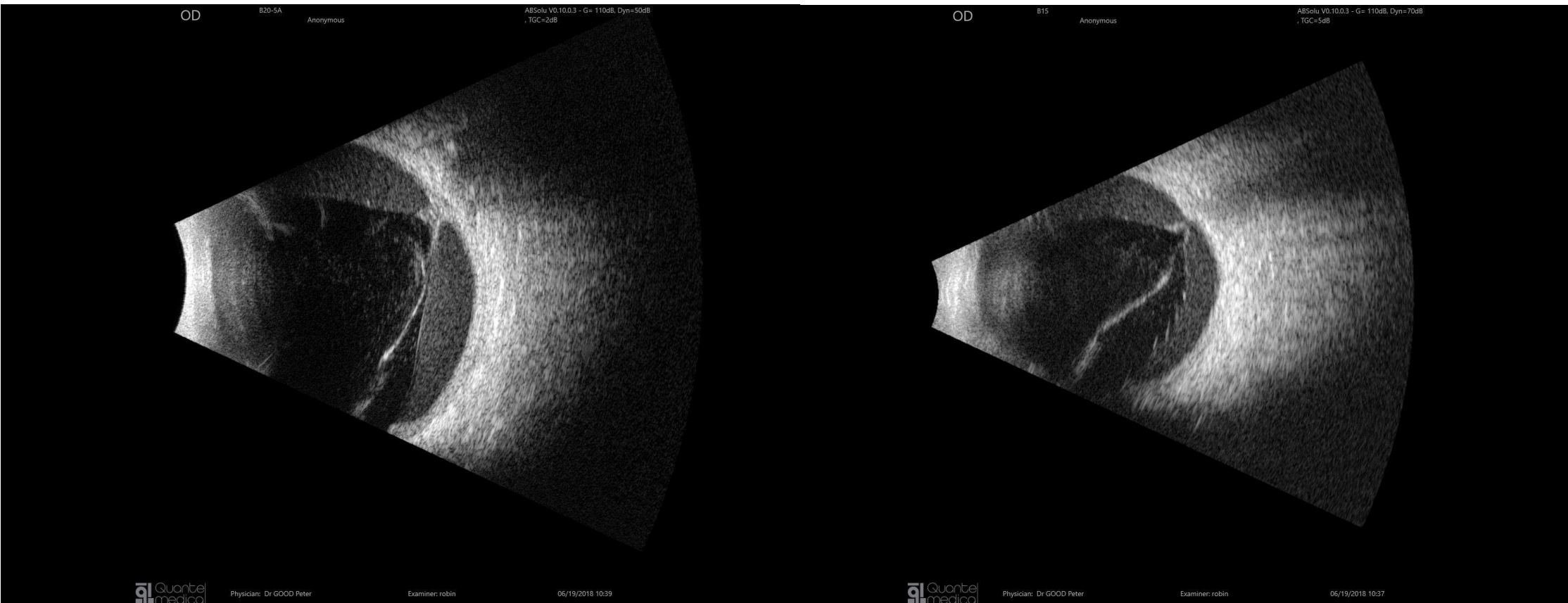
- 15 MHz



Comparison between 20 MHz and 15 MHz probes

- 20 MHz

- 15 MHz



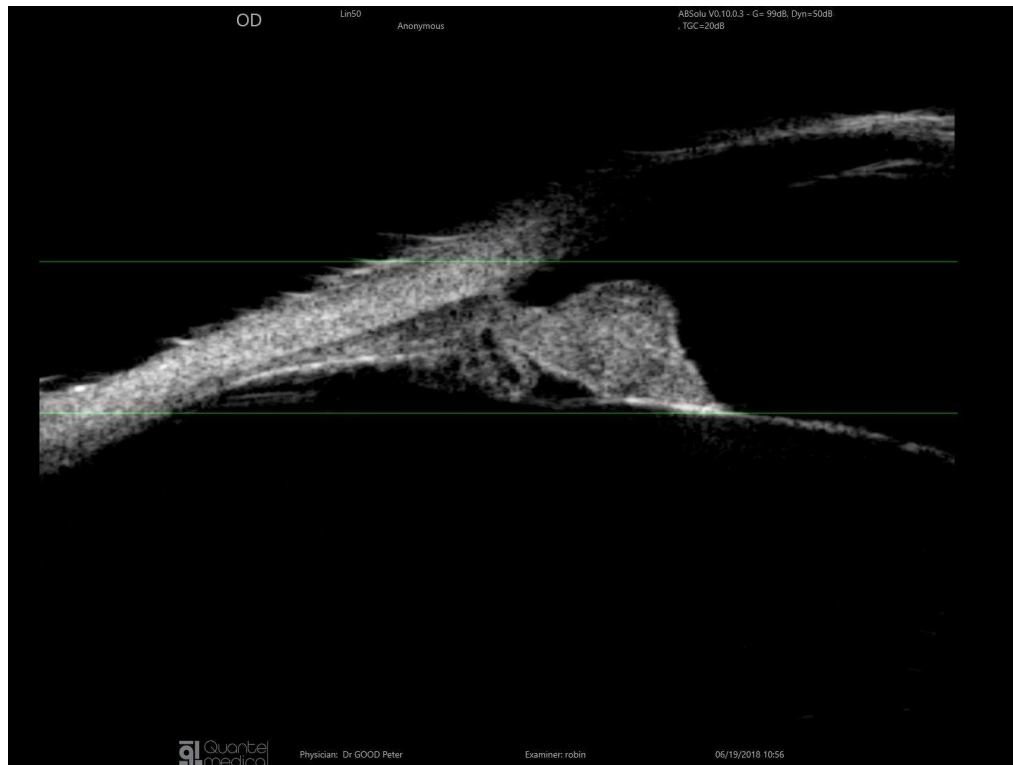


UBM probe

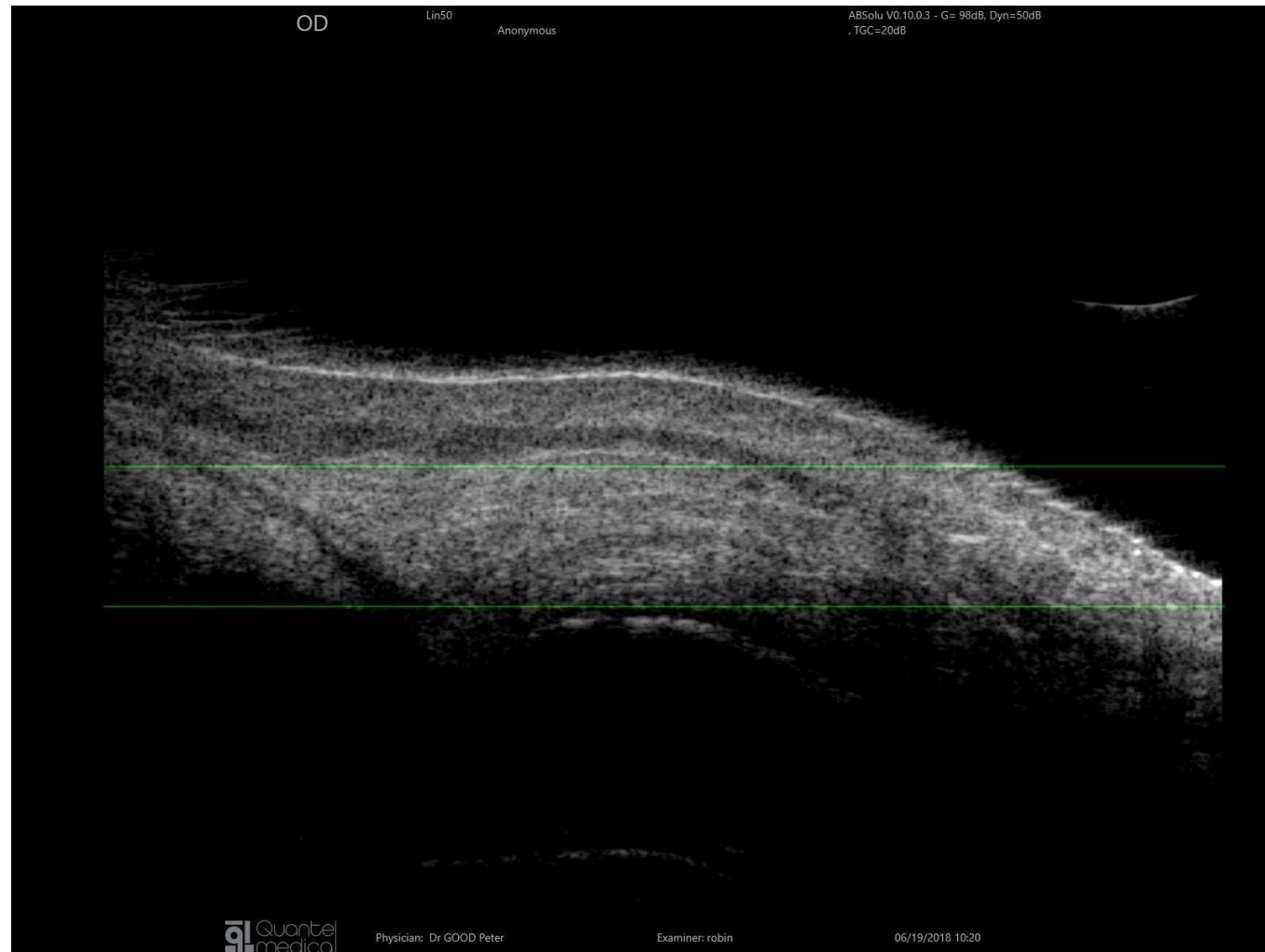


Iris Malignant Melanoma with 50 MHz probe

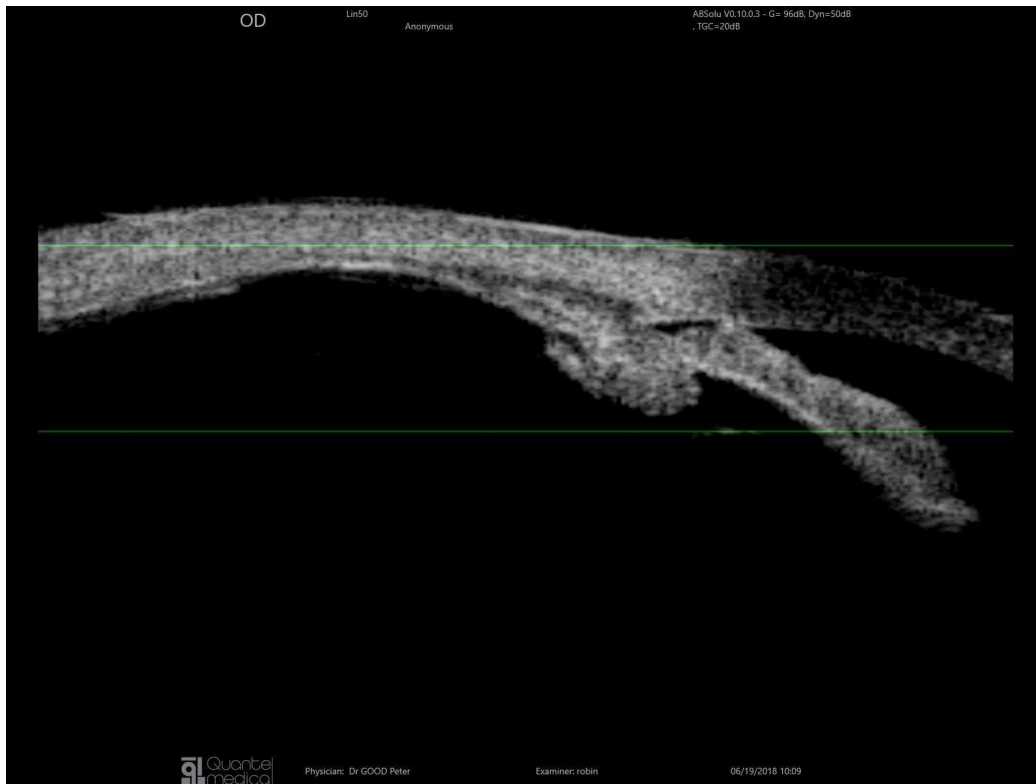
- UBM probe



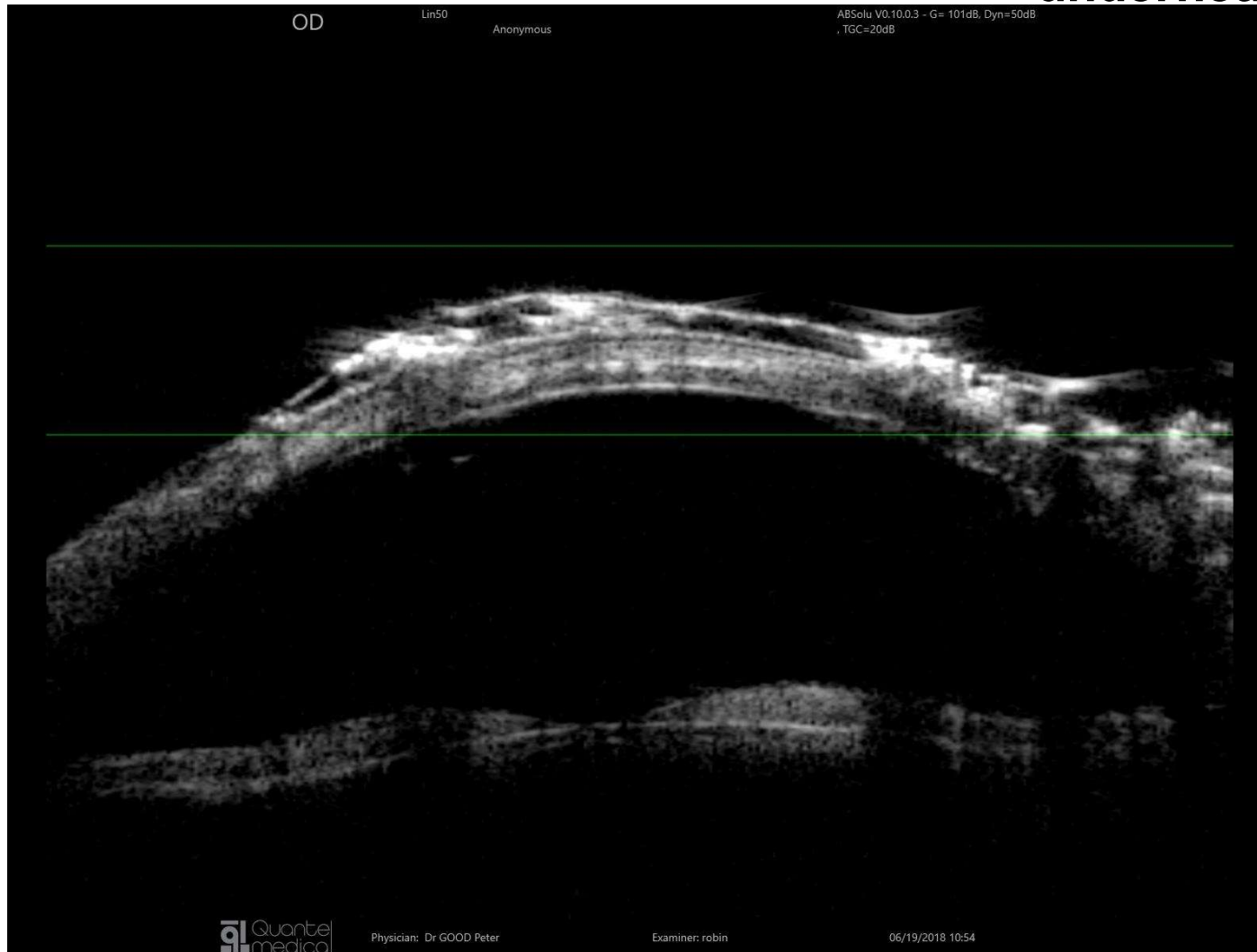
Lacrimal gland Tumour showing increased fat density



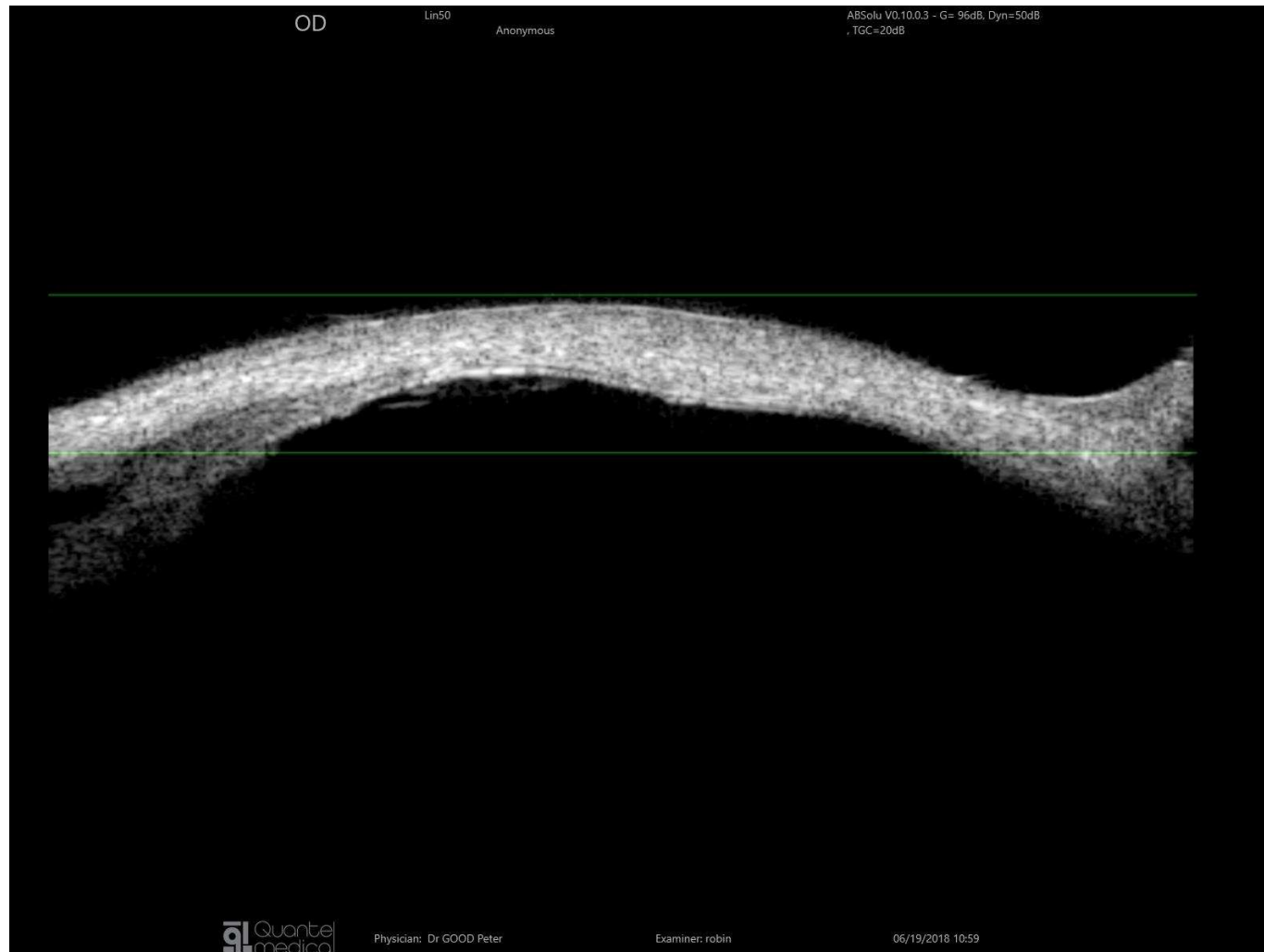
Iridotrabecular contact in a patient with Plateau iris



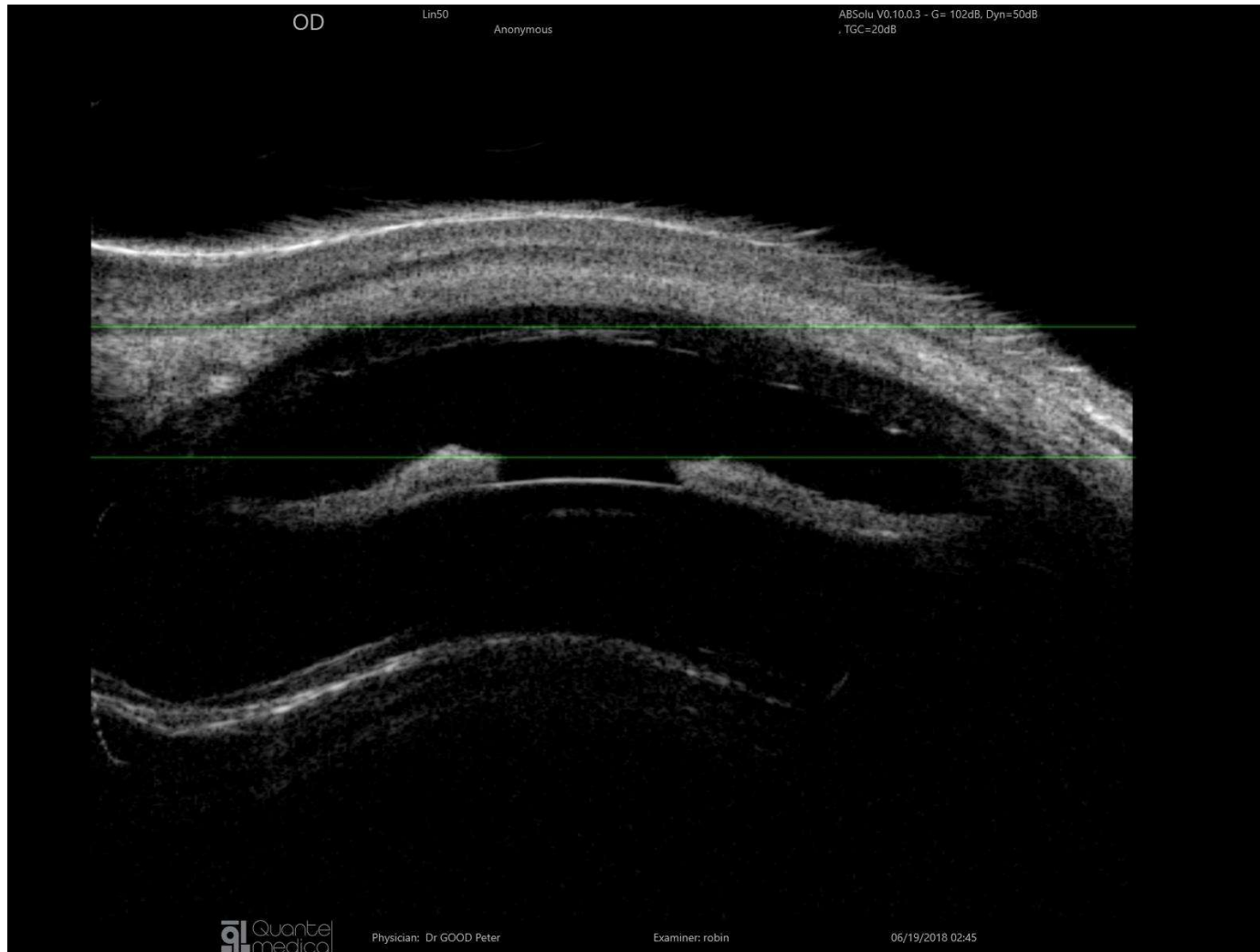
Corneal image of scars underneath the epithelium



Anterior scleritis anterior to the equator. High definition of the sclera/choroid



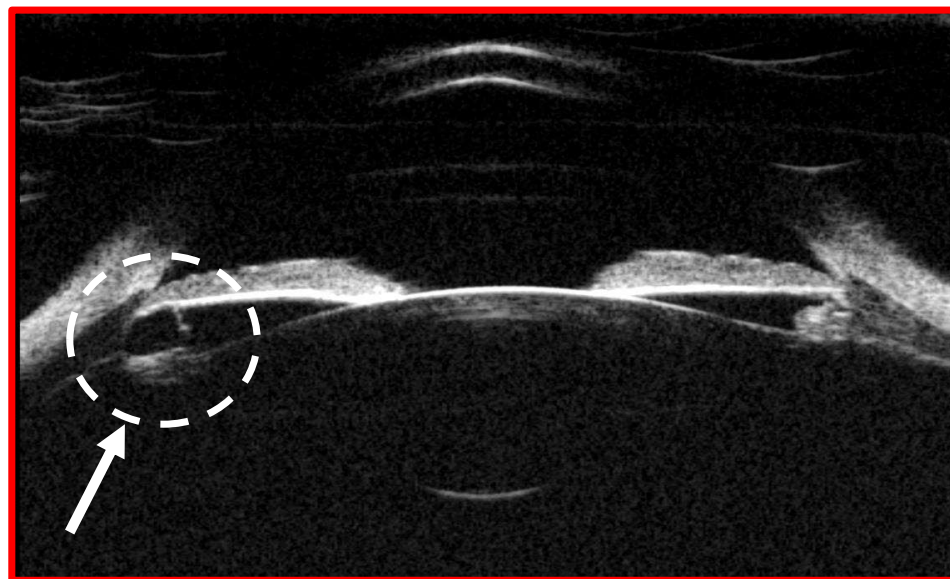
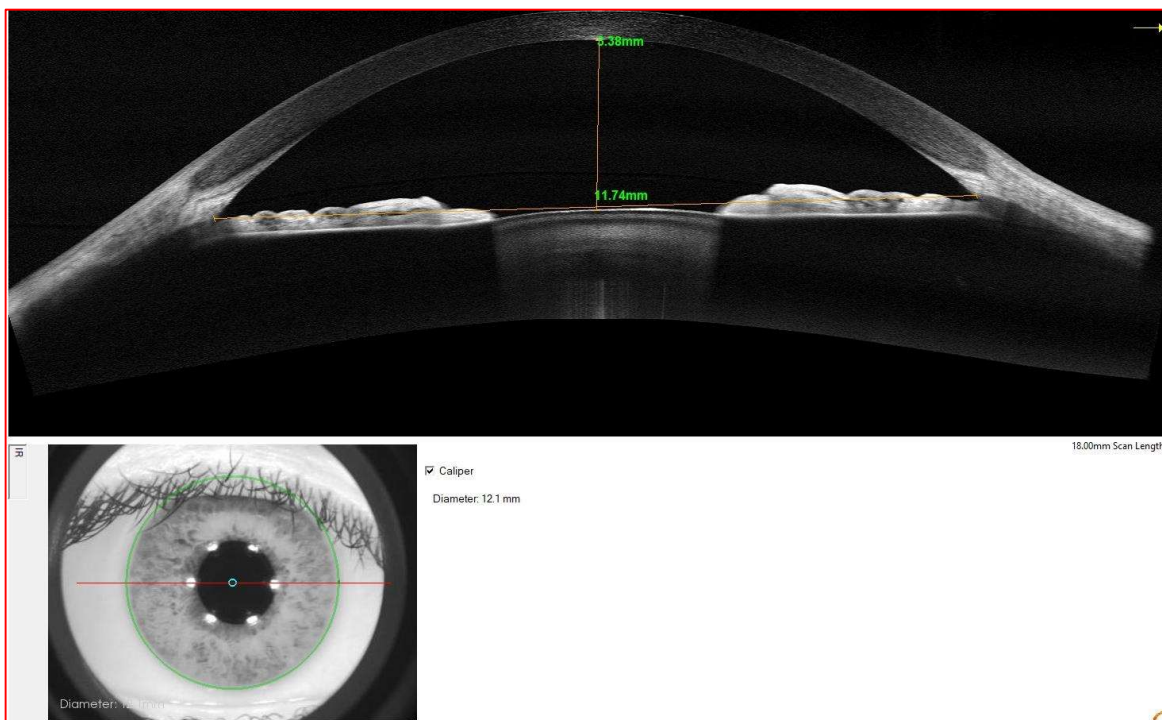
UBM scan through eyelid





UBM: Ciliar sulcus anatomy Pre op OCT/UBM

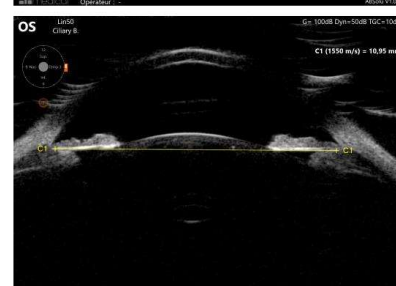
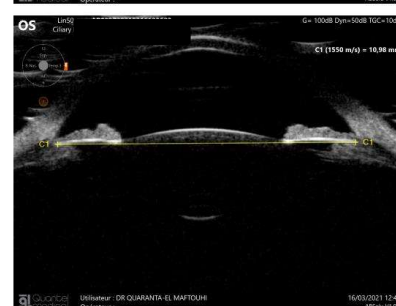
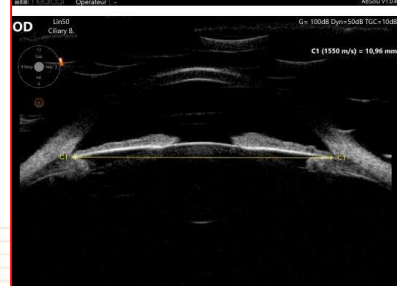
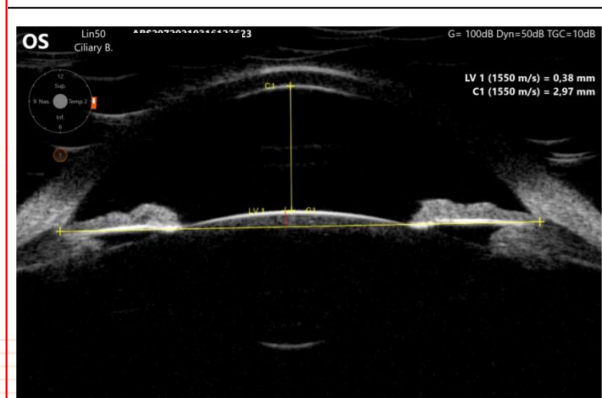
photo by Adil El Maftouhi





UBM : Anterior segment biometry & Vaulting prediction

Photos by Adil El Maftouhi

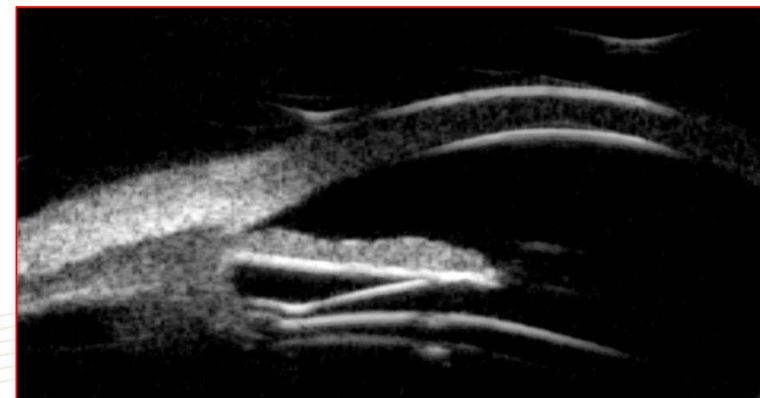


- ACD
- Cristalinian arrow
- Distance Scleral eperon to scleral eperon
- Distance STS



UBM : ICL position control

Photos by Adil El Maftouhi





UBM : Bloc Pupillaire

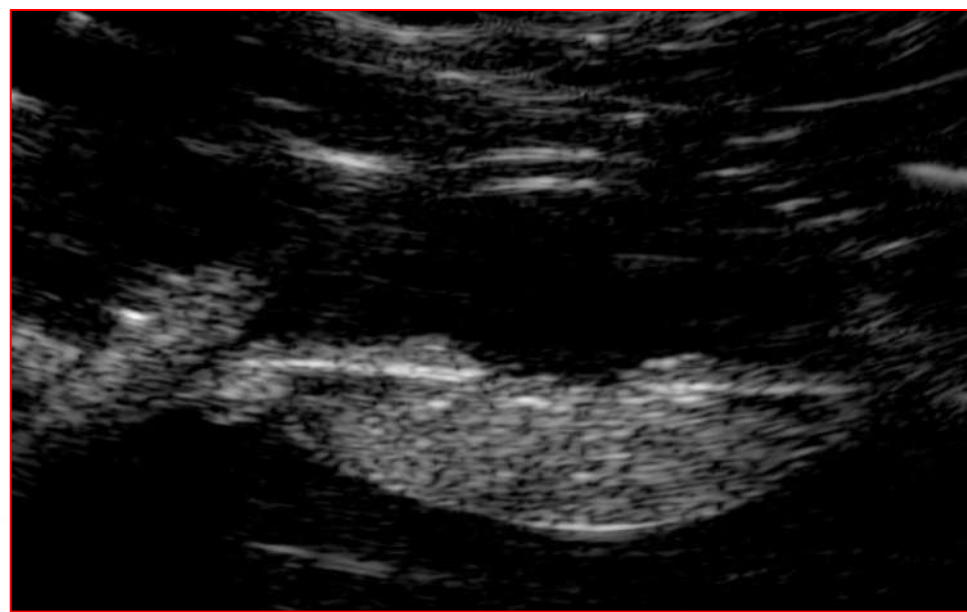
Photo by Adil El Maftouhi





White cataract: 20 Mhz Probe

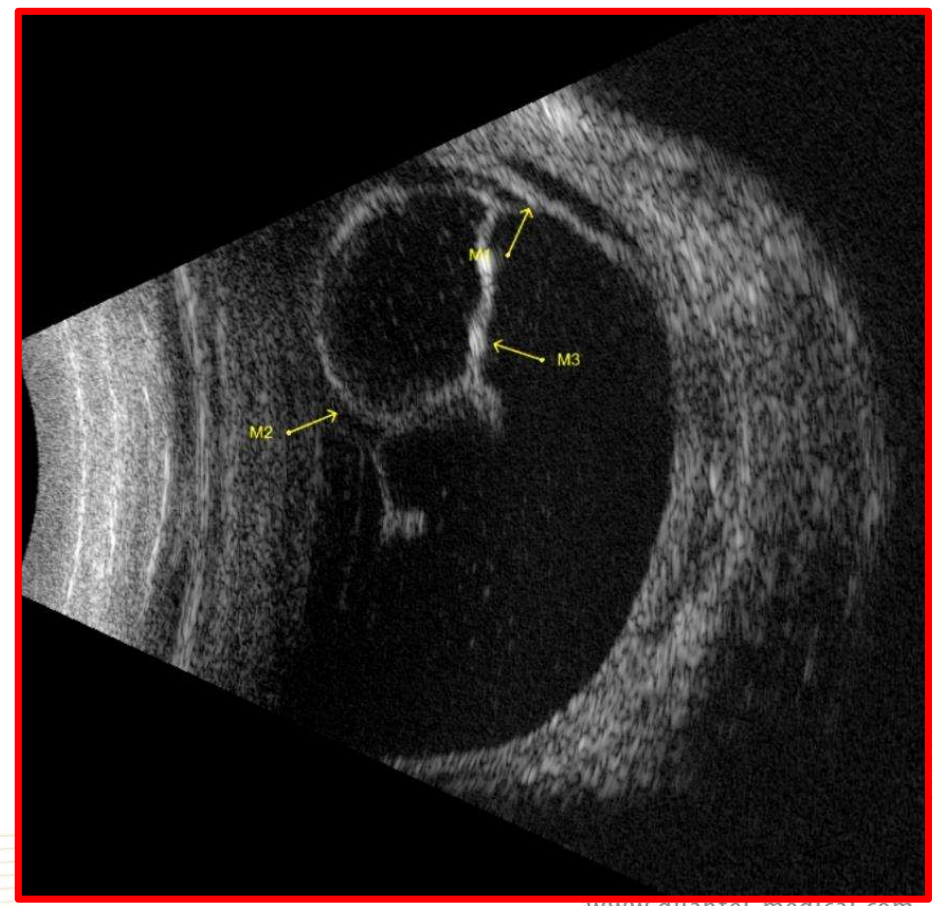
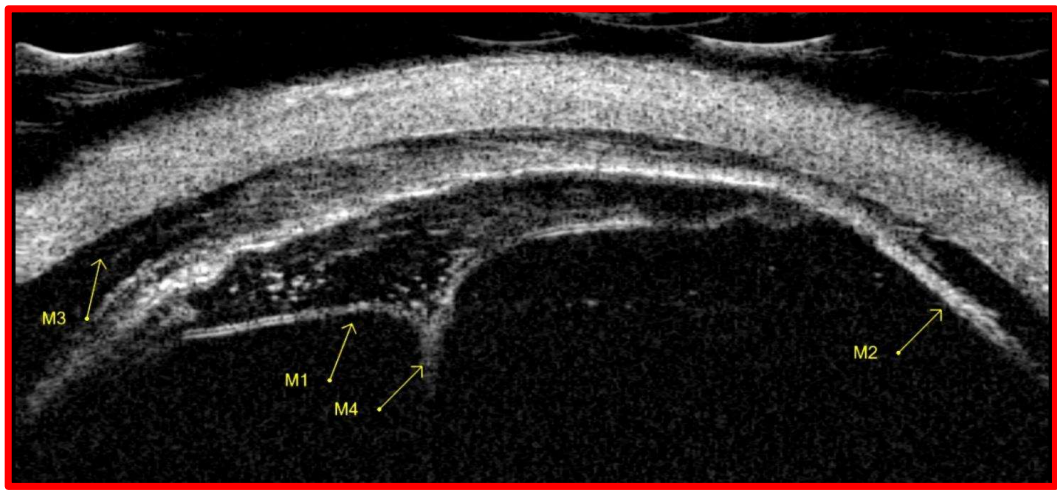
Photos by Adil El Maftouhi





UBM : Retinal + choroidal detachment

Photos by Adil El Maftouhi



Advantages of the B20 5A and the new Lin 50

- 20 MHz
- Ability to scan the vitreous at high resolution
- Greater depth of imaging within the orbit
- Ability to obtain images through the eyelid without applying pressure
- High resolution anterior segment images and ability to image the posterior lens capsule
- 20 MHz resolution of the whole globe.
- Able to perform B scan Biometry with a 20 MHz probe (greater foveal image)

- 50 MHz
- Improved resolution/focussing range
- Much sharper edges: improved corneal images; supraciliary space defined
- Greater depth in Lens mode gives better definition of posterior lens capsule
- Easier identification of scleral spur; can identify PAS (posterior anterior synechiae)
- Ability to image equatorial region.



Versatil platform

- ◆ Biometry probe (classic or Probeam)
- ◆ B15Mhz
- ◆ Annular B20Mhz 5 rings
- ◆ UBM probe
- ◆ A-STD

B15 and/or B20 ?

- If the Dr has a lot of patient with silicon filled vitreous
- If the Dr does a lot of muscle and orbit examination

B15 should be considered, otherwise, B20 can do the rest of the examination
« alone »





Thank you for your attention

