

Clinical Ultrasound Booklet Gynecology

WHC team

August 2021

Uterus

B-mode

Aplio
Women's Health range



PVT-781VT/E (11C3)



Uterus, Endometrium

**Wide band endocavitary transducer,
wide angle, resolution**

**The different layers of the endometrium,
vascular bed in myometrium and cervix
are clearly outlined.**

Uterus

B-mode

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Women's Health range



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Uterus, Fibroma

Wide band endocavitary transducer

**Excellent contrast resolution improves
lesion detection**

Uterus

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Women's Health range



PVT-681MVL (11CV3)



Uterus, Adenomyosis

**Wide band volumetric endocavitary
transducer, resolution and penetration**

**Excellent penetration with homogeneous
image from near to far field even in this
case of severe adenomyosis.**

Ovary

B-mode

Aplio
Women's Health range



PVT-681MVL (11CV3)



Ovary, Endometriotic cyst

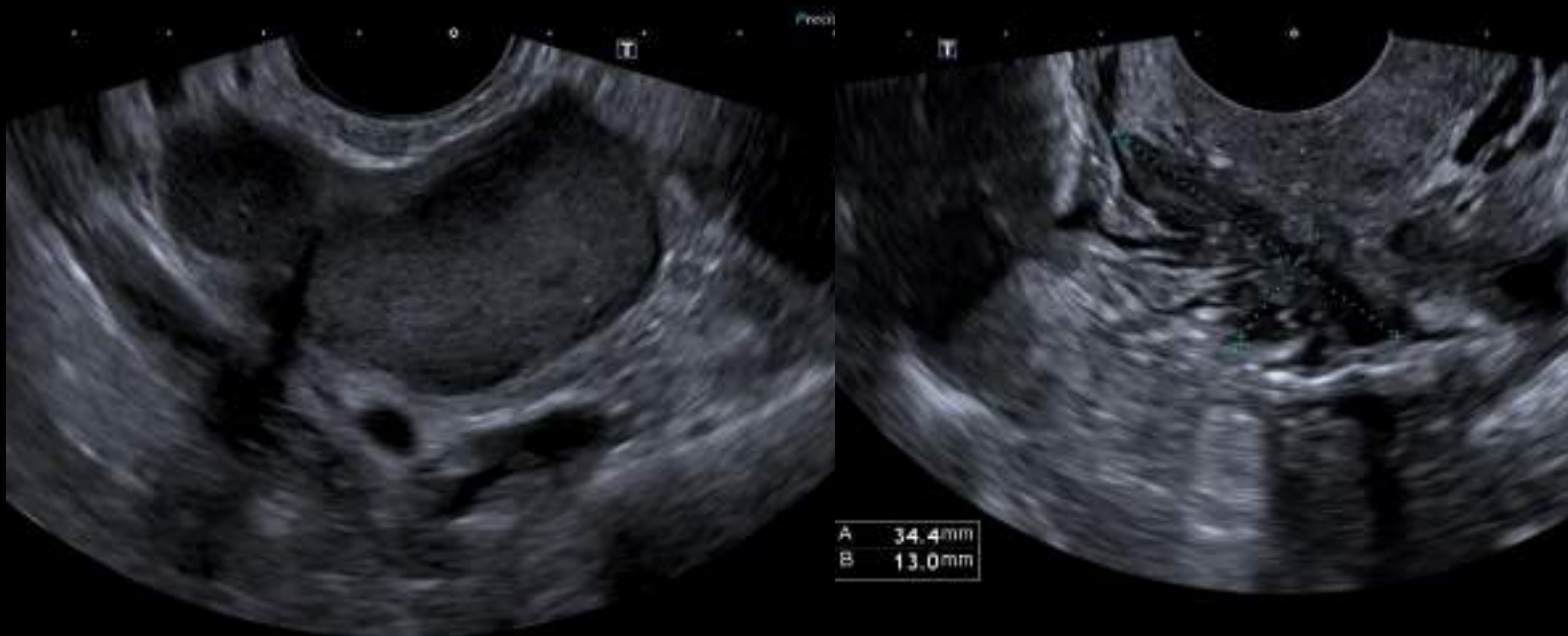
**Wide band volumetric endocavitary
transducer, contrast resolution and
Quickscan**

**Follicles, cyst and endometriotic tissue
can be clearly distinguished. Some
irregular myometrium is also visible.**

Ovary

B-mode

Aplio
Women's Health range



PVT-681MVL (11CV3)



Endometriosis

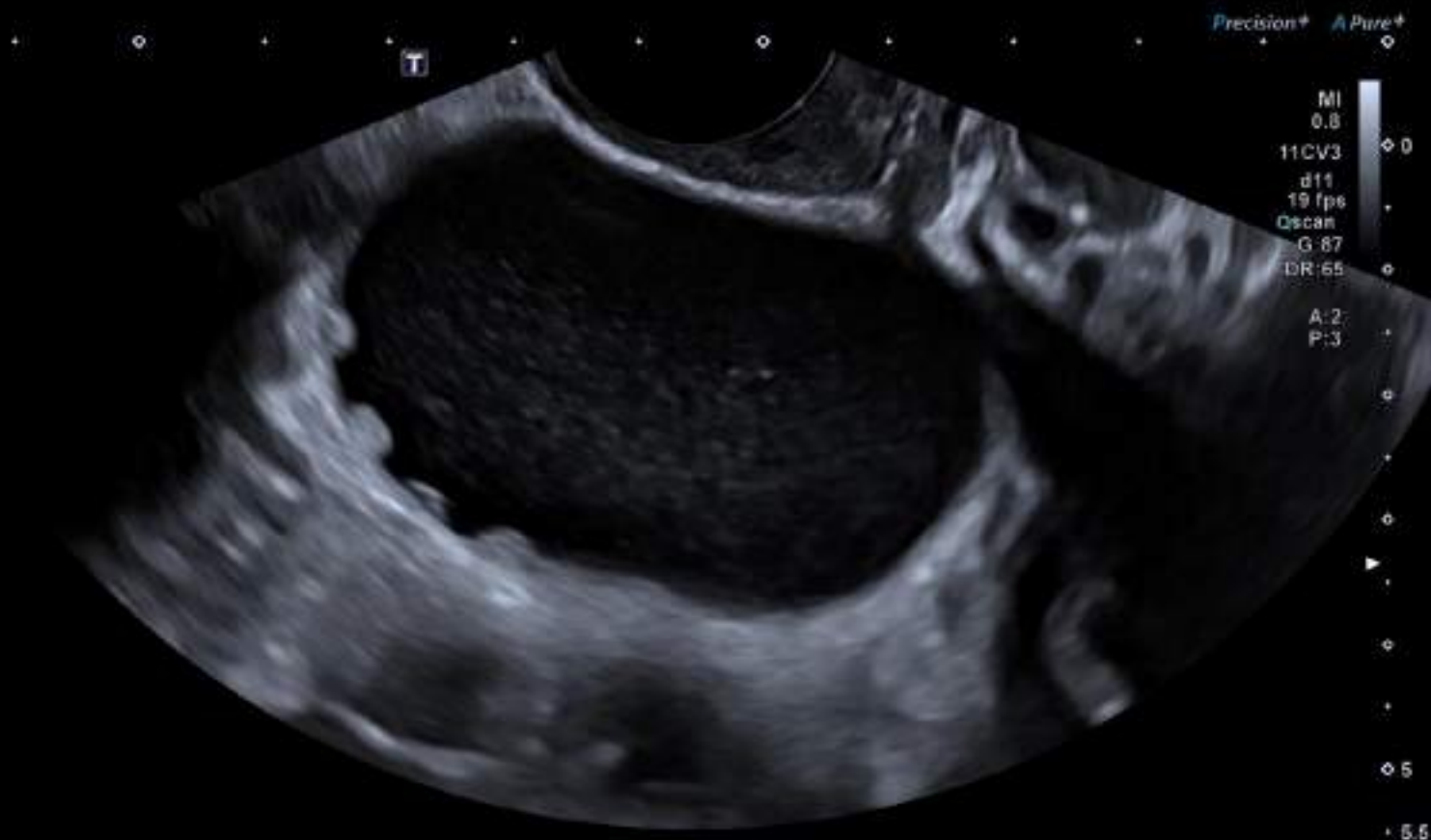
**Wide band volumetric endocavitary
transducer, resolution**

**Excellent contrast resolution is needed to
detect endometriotic tissue especially in
difficult to reach areas.**

Ovary

B-mode

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Women's Health range



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Panovarian cyst

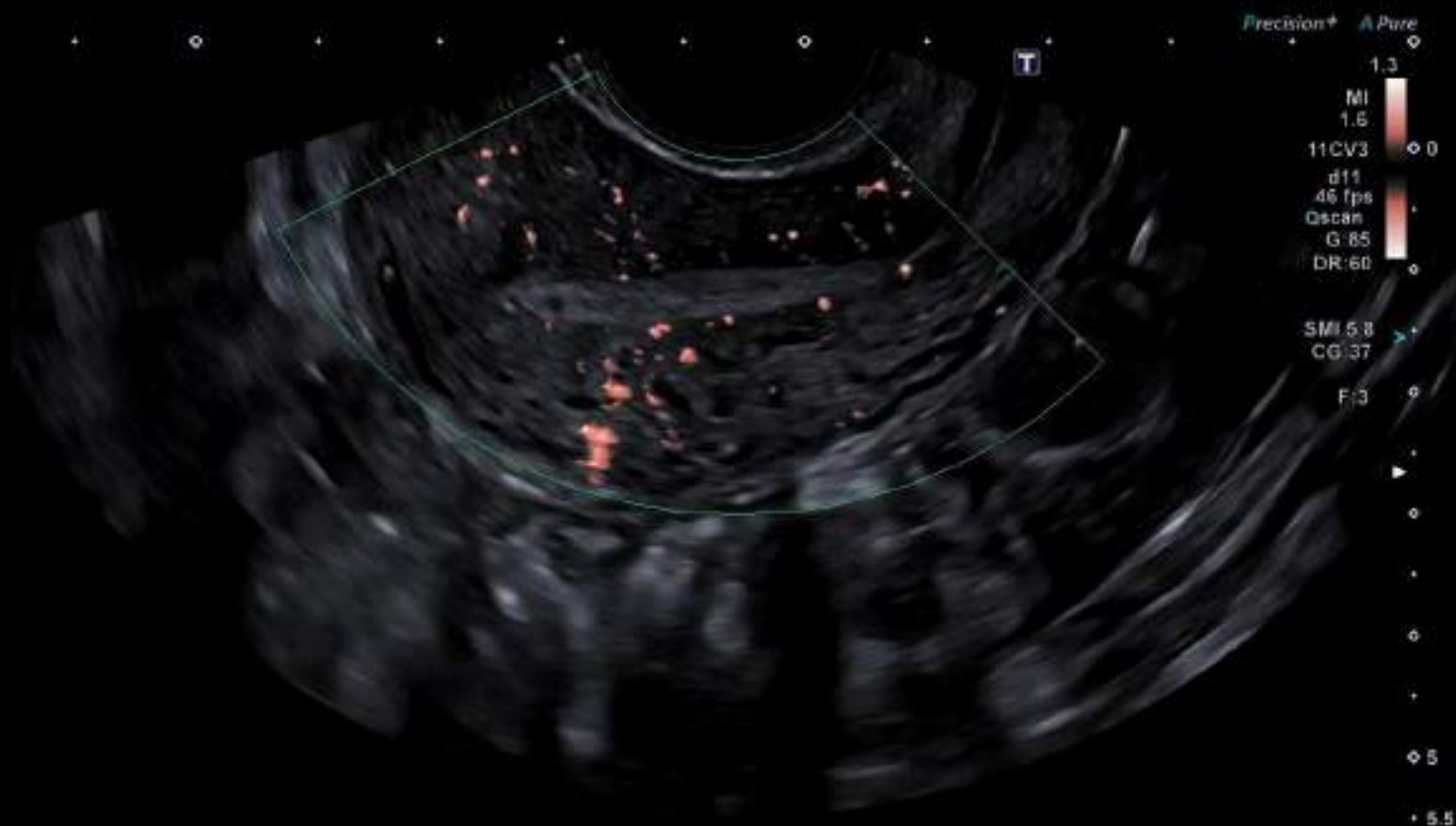
**Wide band volumetric endocavitary
transducer, resolution and Quickscan**

**Cystic wall, papillations and low level
echo's are all equally good visible thanks
to automatic Quickscan.**

Uterus

Superb Micro-vascular Imaging (SMI)

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Women's Health range



PVT-681MVL (11CV3)



Perfusion of myometrium

SMI and Doppler Luminance with highest frame rate, sensitivity and resolution, no motion artifacts

Minute arteries can be seen. At this stage of the menstrual cycle the spiral arteries in endometrium are not yet visible.

Uterus

Superb Micro-vascular Imaging (SMI)

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Endometrium polyp, feeding artery

Excellent SMI with highest framerate, sensitivity and no motion artifacts

SMI clearly shows the feeding artery supplying endometrium polyp with high accuracy while preserving B-mode information.

Uterus

HyFoSy - Hysterosalpingo-foam-sonography

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Women's Health range



PVT-681MVL (11CV3)



Endometrium cavity and tube with foam

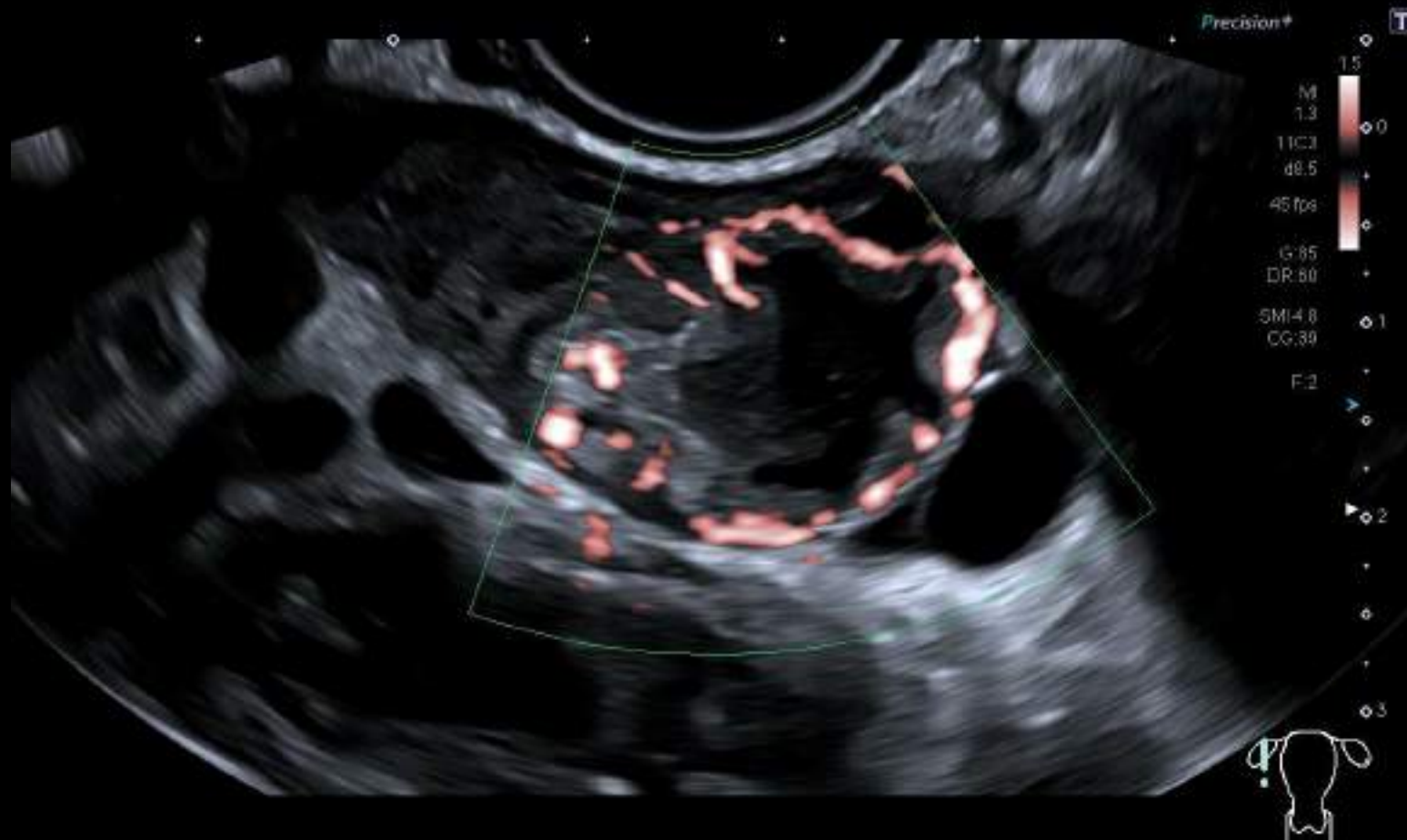
Wide field of view and good framerate

Patency of tube is easily confirmed in this realtime scan.

Ovary

Superb Micro-vascular Imaging (SMI)

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Women's Health range



PVT-781VT/E (11C3)



Ovary, Corpus Luteum cyst

SMI highest frame rate, sensitivity and resolution, no motion artifacts

The different tissue structures within the cyst remain perfectly visible even during SMI.

Ovary

Superb Micro-vascular Imaging (SMI)

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Complex ovarian lesion

SMI highest frame rate, sensitivity and resolution, almost no motion artifacts

SMI shows vessel architecture while preserving B-mode. Note the high framerate while box is covering entire lesion.

Ovary

IOTA-ADNEX model

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Advanced stage ovarian cancer

IOTA-ADNEX model

IOTA gives clear indication of increased risk for malignancy in this lesion (from previous slide), also shows the risk for which stage of malignancy.

Ovary

B-mode

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Women's Health range



PVI-475BX (8CX1)



Large multi cystic ovarian mass

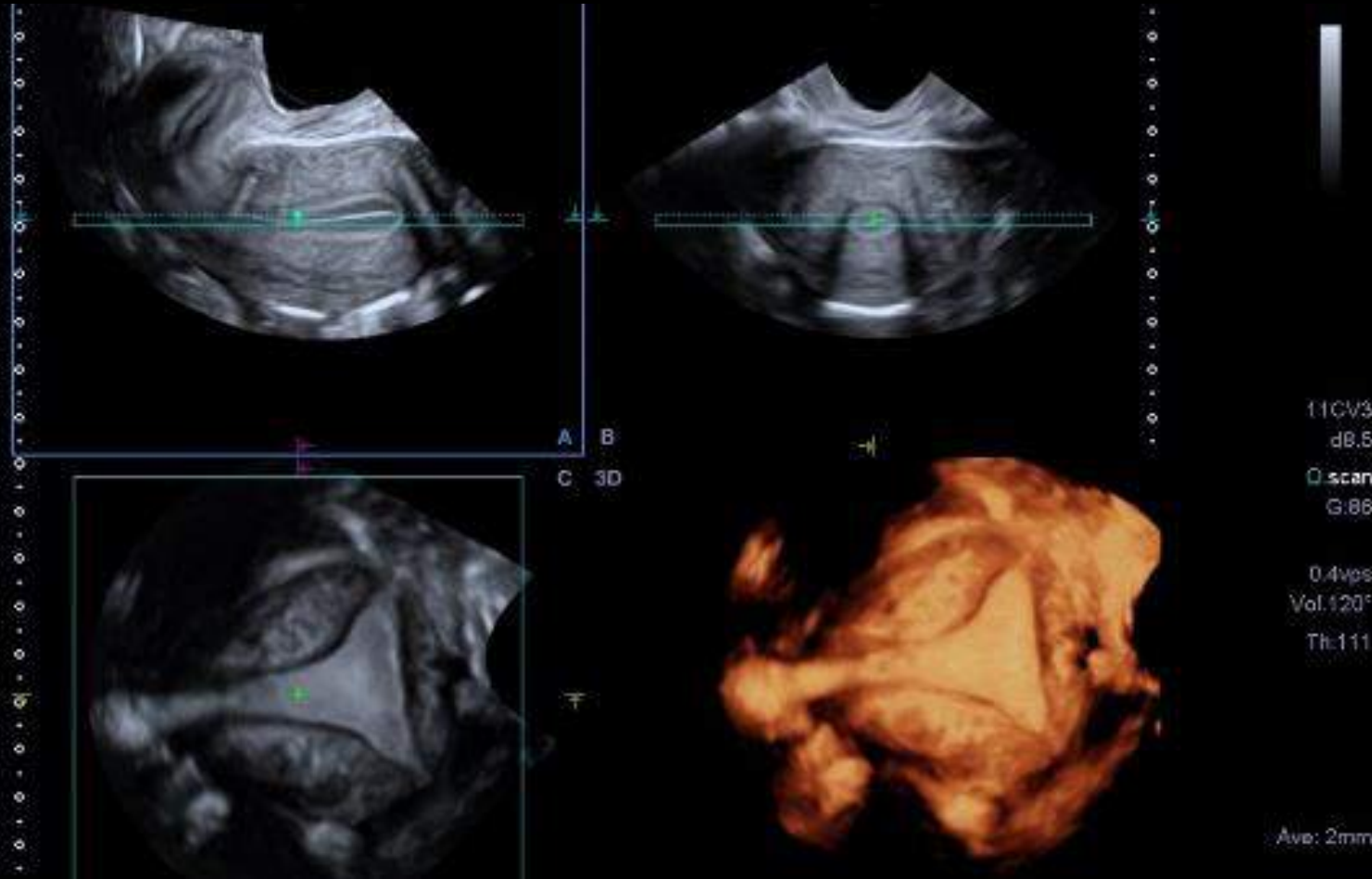
Active matrix wide band convex transducer, Quickscan

In large lesions the use of the abdominal transducer gives good overview, penetration and resolution.

3D rendering

MPR & Volume

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Women's Health range



PVT-681MVL (11CV3)



Uterus, Endometrium

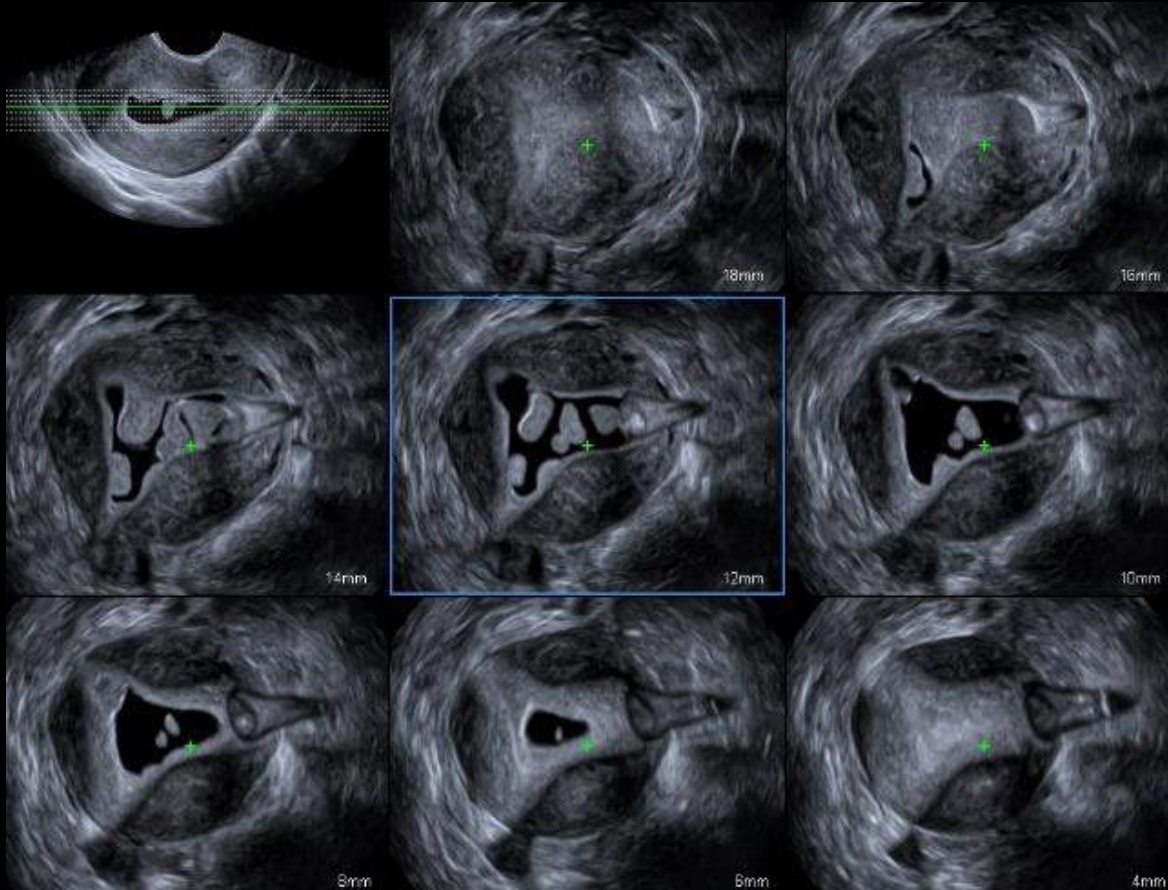
**MultiPlanar Reconstruction image (MPR)
with thick slice and surface volume
rendering (VR)**

**All 3D scanplanes visualized in highest
resolution including volume rendered
image.**

3D rendering

MultiView

Aplio
Women's Health range



PVT-681MVL (11CV3)



Uterus with several polyps

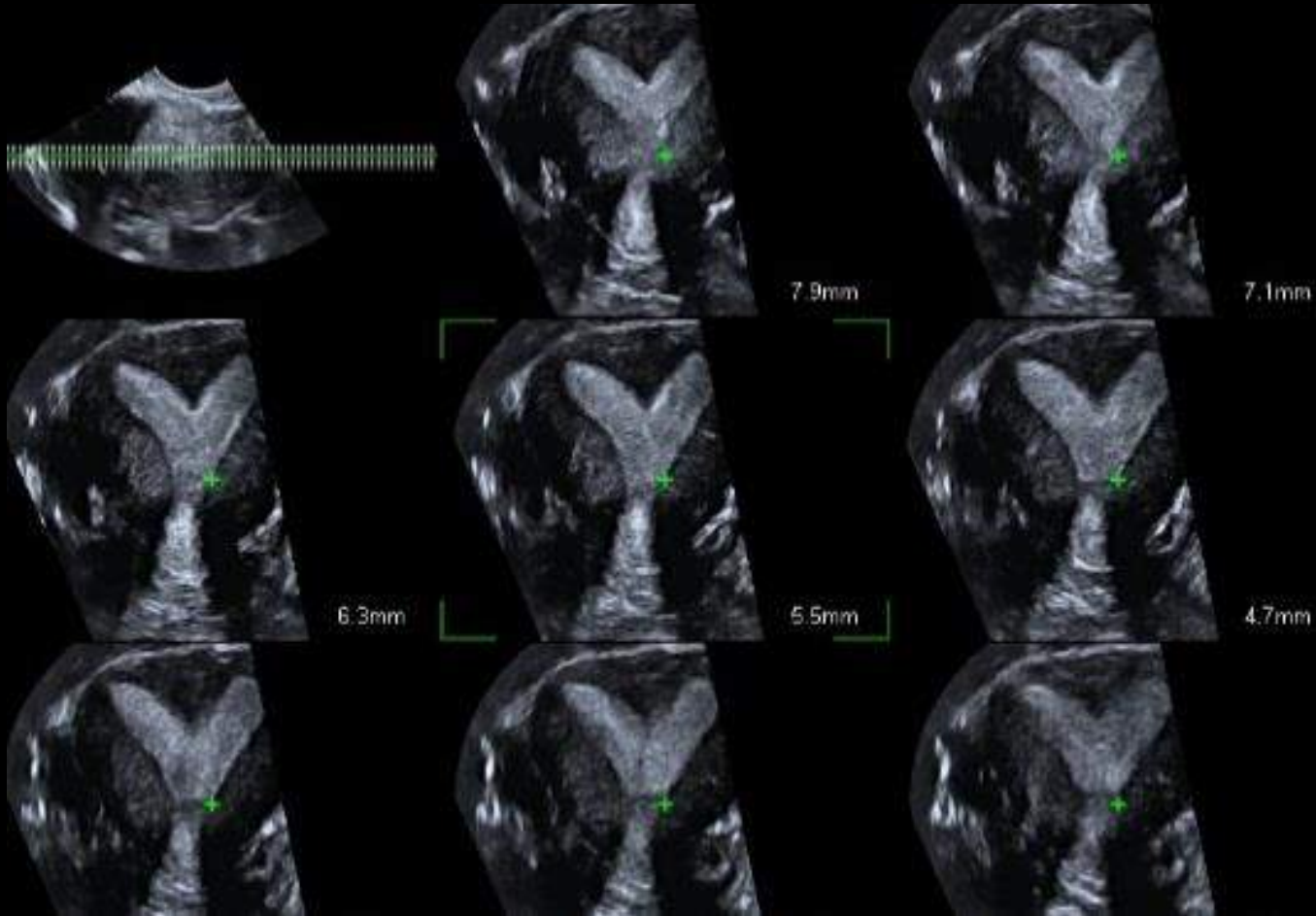
MultiView, C-plane

MultiView and C-plane for quick overview of all polyps, not possible in just A and B plane. Made possible by saline infusion and 3D sweep.

3D rendering

MultiView

Aplio
Women's Health range



PVT-681MVL (11CV3)



Bicornuate Uterus

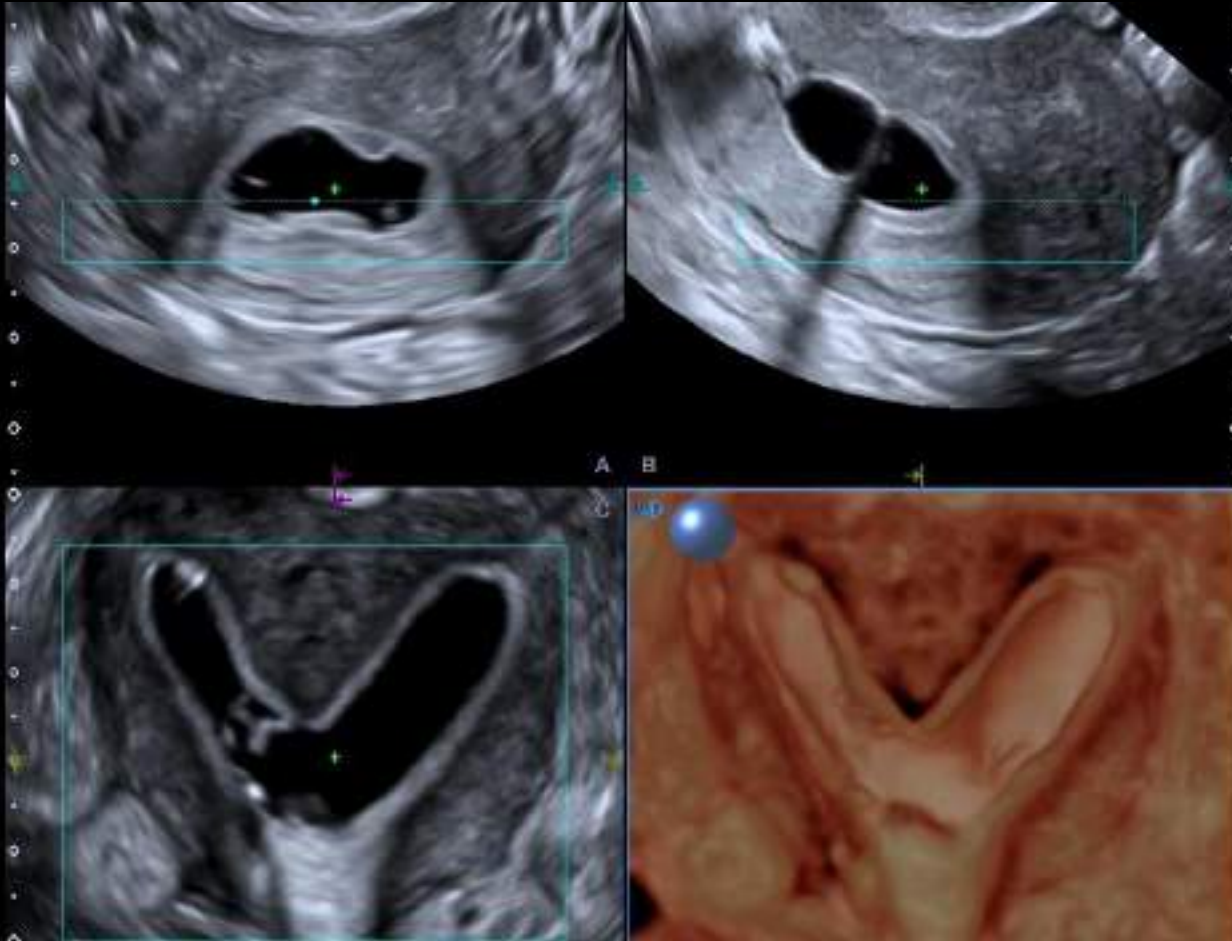
MultiView C-plane

The C-plane of the uterus cannot be obtained in 2D, therefore 3D and MultiView C is ideal for detecting congenital uterine abnormalities.

3D rendering

MPR

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PVT-681MVL (11CV3)



Bicornuate Uterus with adhesions

3D MultiPlanar (MPR) and Luminance
volume rendered image, widest 3D
angle (180°x150°)

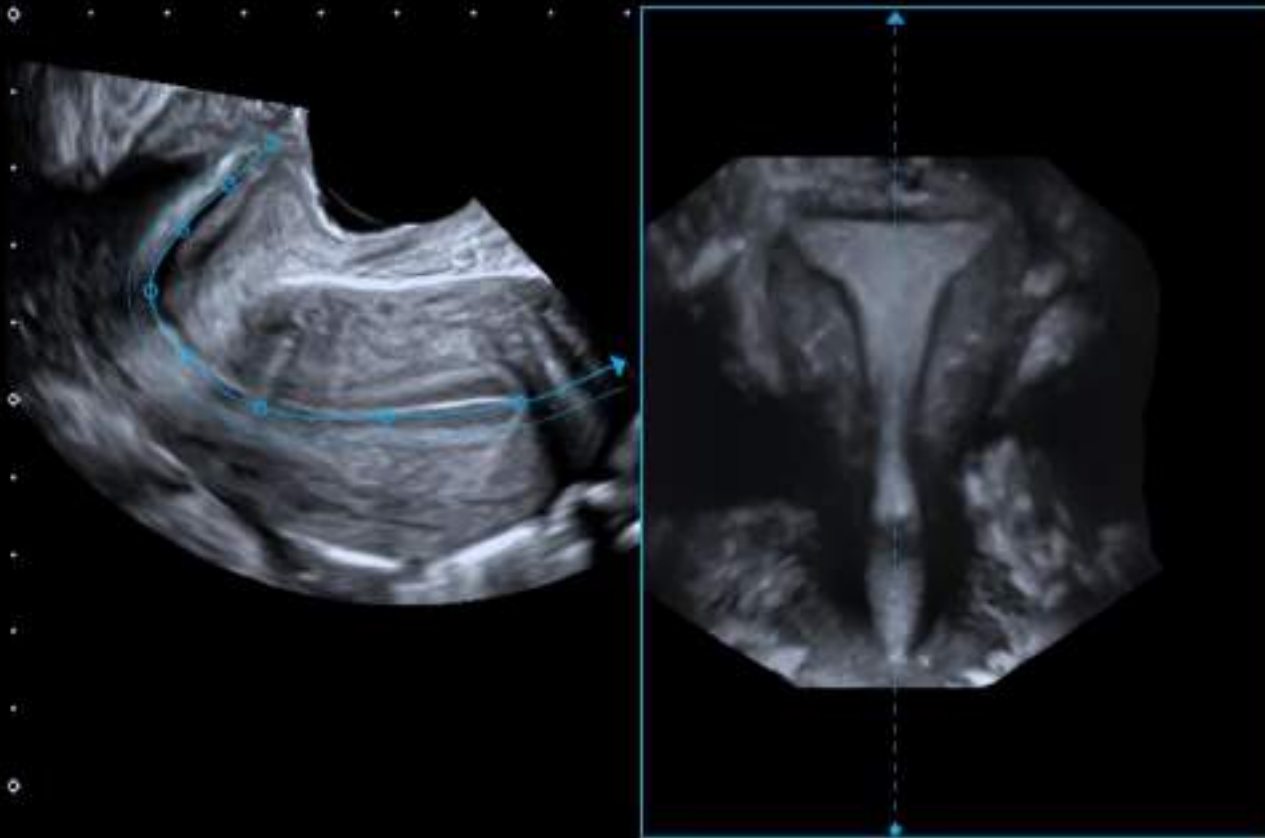
11CV3
dB:0
Q:scan
G:88
0.1vps
Vol:150°
Th:133

Saline infusion is being used to get good
overview of the adhesions in this
bicornuate uterus.

3D rendering

OmniView

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Women's Health range



11CV3
dB.5
Q.scan
G.89
0.4vps
Vol.120°

PVT-681MVL (11CV3)



Uterus, Endometrium

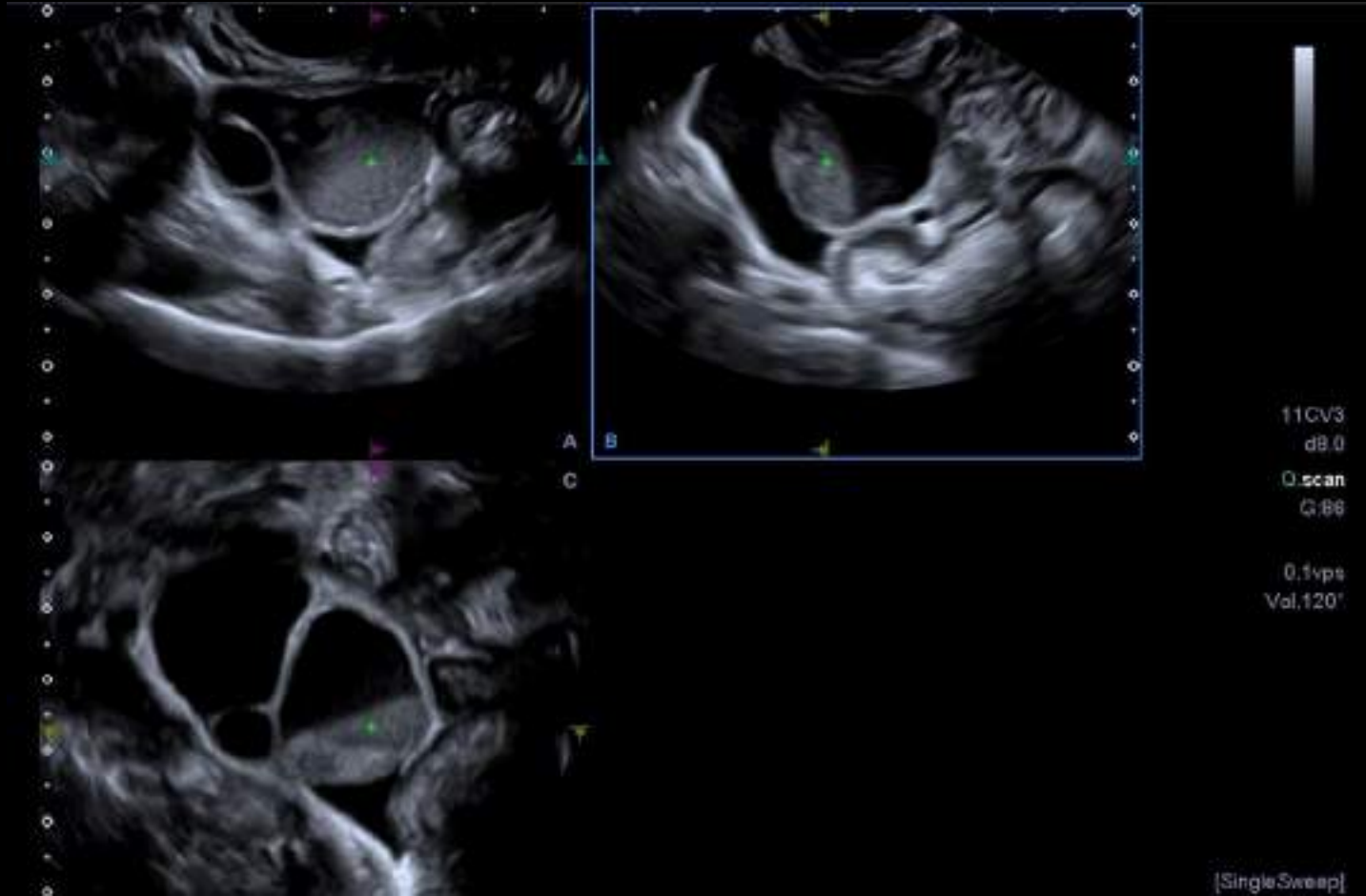
OmniView with thick slice

OmniView with thick slice is really useful and fast to get a good impression of the coronal plane especially in curved structures like in this case.

3D rendering

MPR

Aplio
Women's Health range



PVT-681MVL (11CV3)



Ovary with cyst and endometriotic tissue

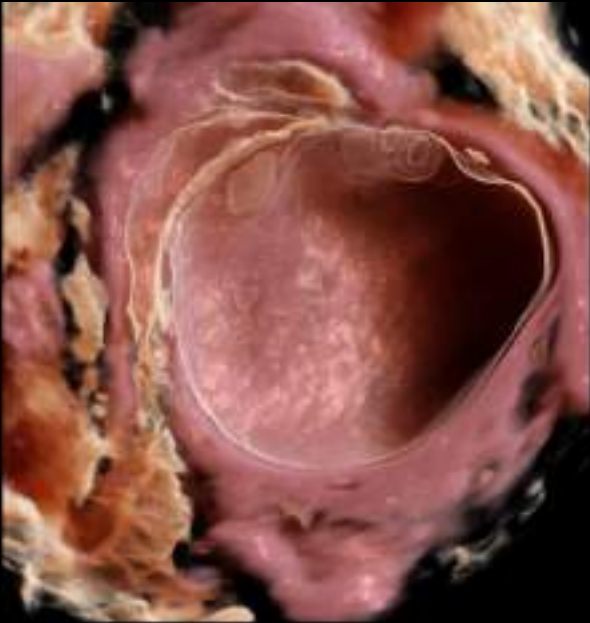
MultiPlanar Reconstruction (MPR)

In 3D the subtle tissue differences in this ovary are evident, allowing accurate diagnosis and extend of endometriosis.

3D rendering

Shadow Glass

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Women's Health range



PVT-681MVL (11CV3)



Ovarian cyst, Ovary with several follicles

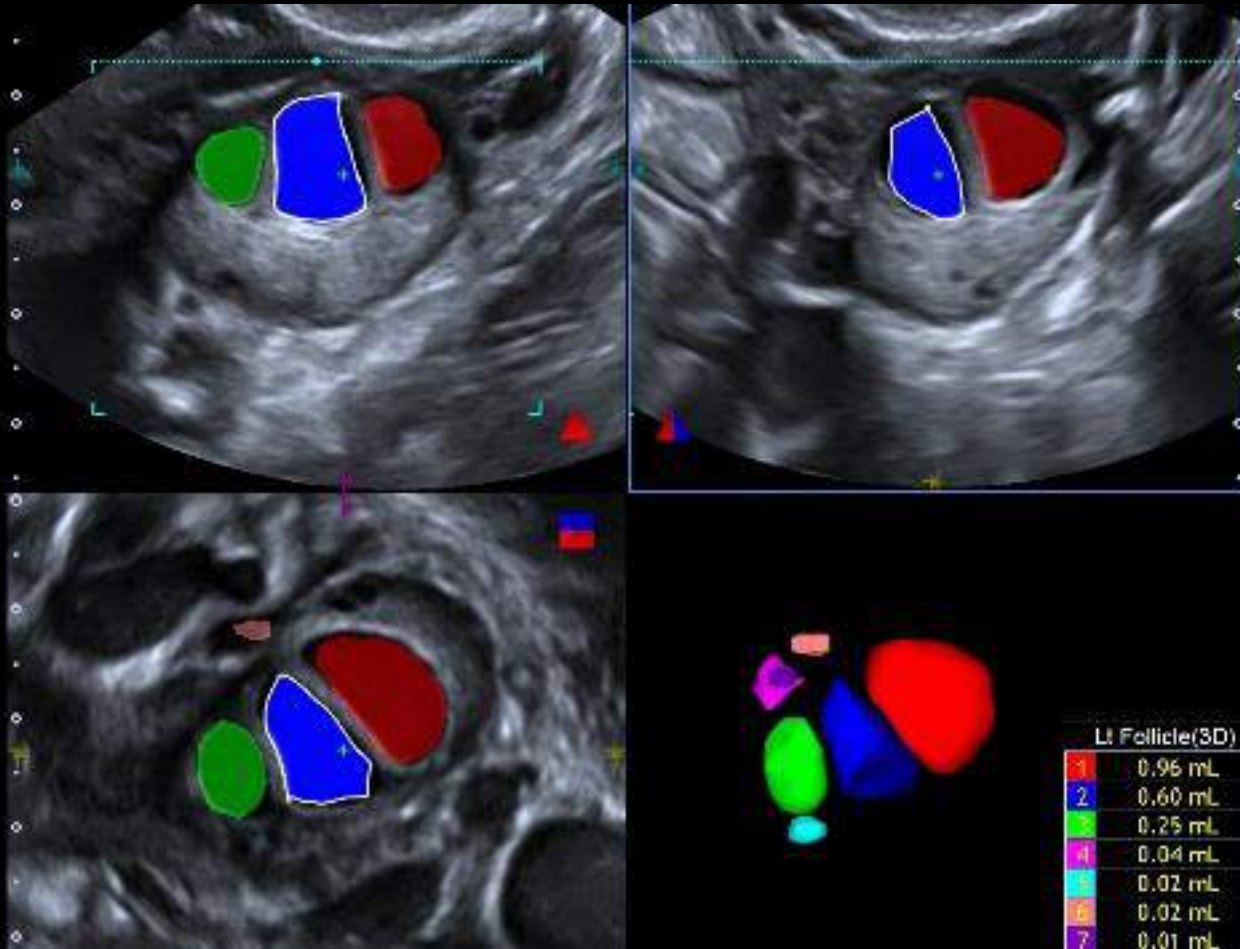
Shadow Glass with and without Inversion mode

Shadow Glass displays images in a more lifelike way.

3D rendering

Follicle count

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PVT-681MVL (11CV3)



Ovary with follicles

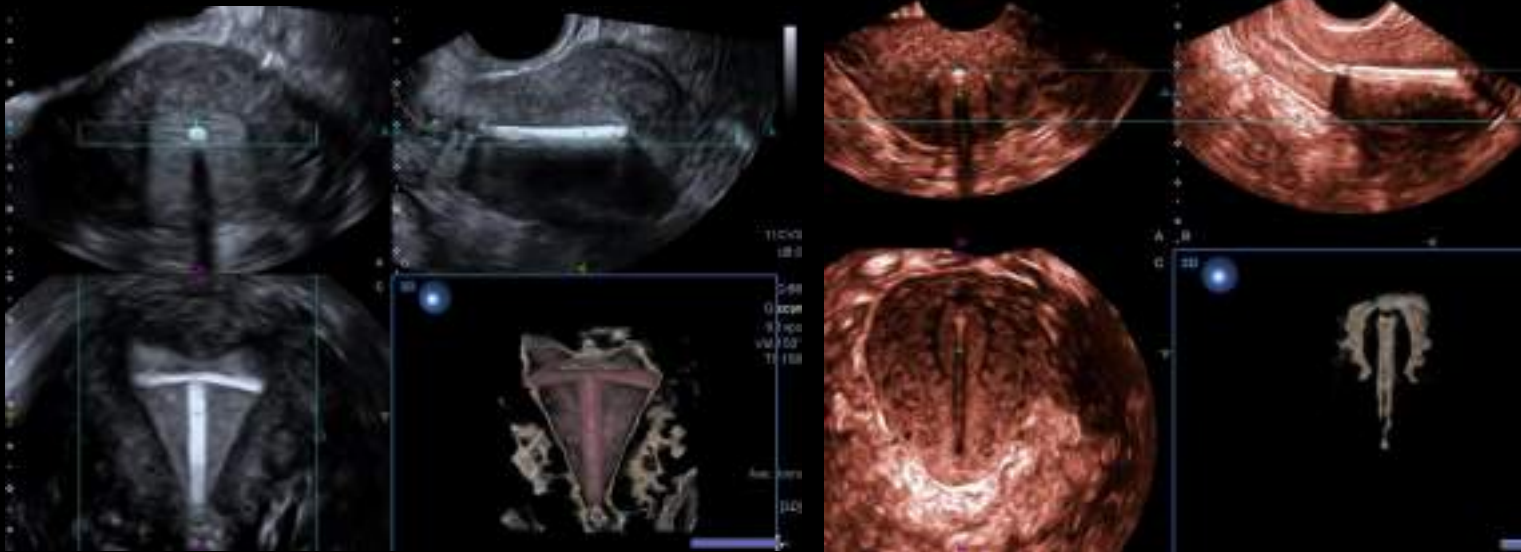
Follicle count, wide 3D angle (130°) used.
(max 150° available)

Accurate detection and measurement of
all follicles after one 3D sweep decreases
examination time significantly.

3D rendering

MPR with Shadow Glass volume image

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Women's Health range



PVT-681MVL (11CV3)



Intra Uterine Device (IUD)

**MultiPlanar Reconstruction,
Shadowglass, wide angle 3D (150°,130°)**

**3D gives more accurate location of IUD
and the type of IUD can easily be
identified.**

3D rendering

*FlyThru***

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PVT-681MVL (11CV3)



Uterus with saline infusion

*Flythru***

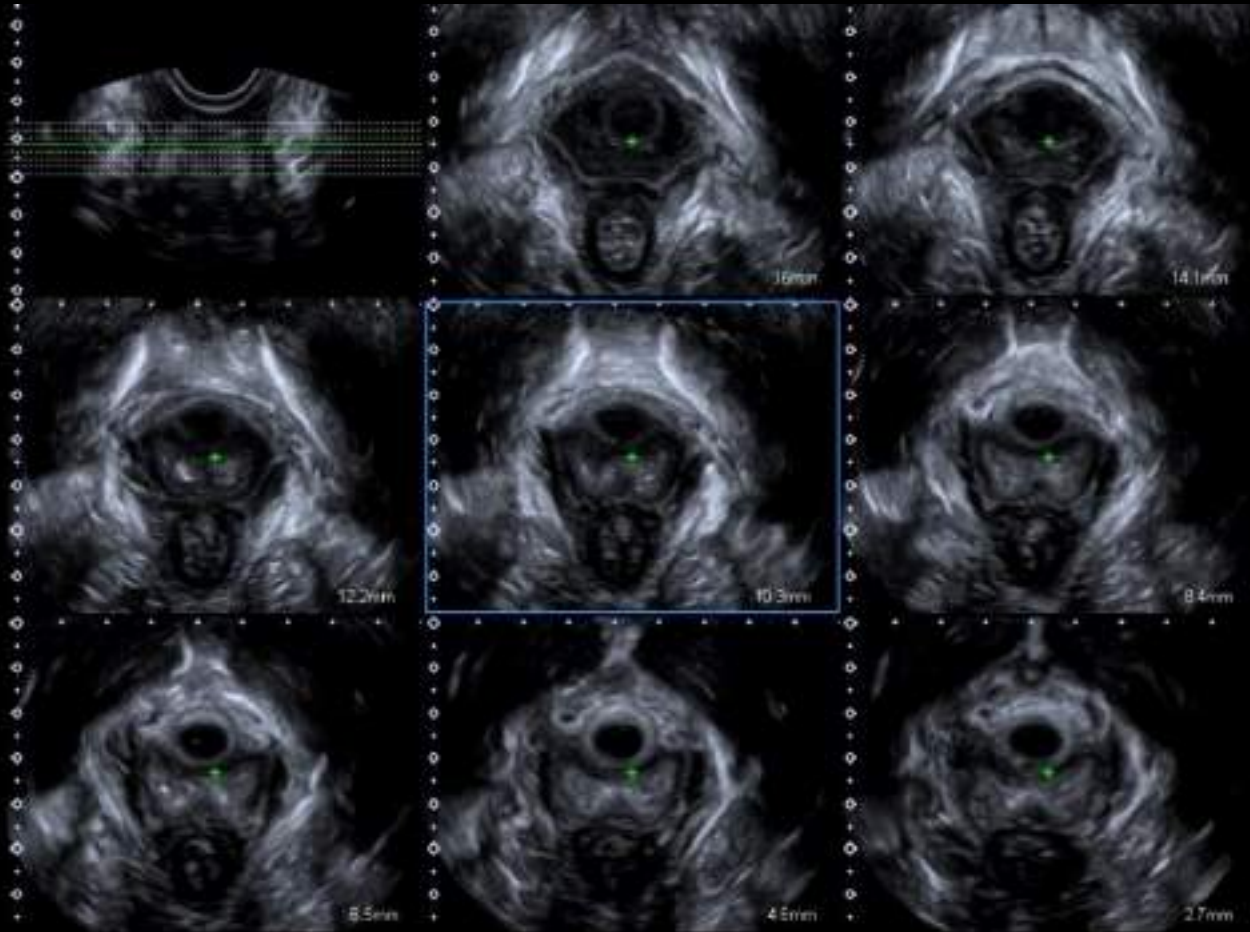
Virtual sonohysteroscopy offers even more views than hysteroscopy (from fundus to cervix), causes less patient discomfort and is significant cheaper. In many cases it can prevent hysteroscopy.

** only available on Aplio i-series

3D rendering

Pelvic floor

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Women's Health range



11CV3
dB:0
Q:scan
G:85
0.1vps
Vol:150°
Th:121

PVT-681MVL (11CV3)



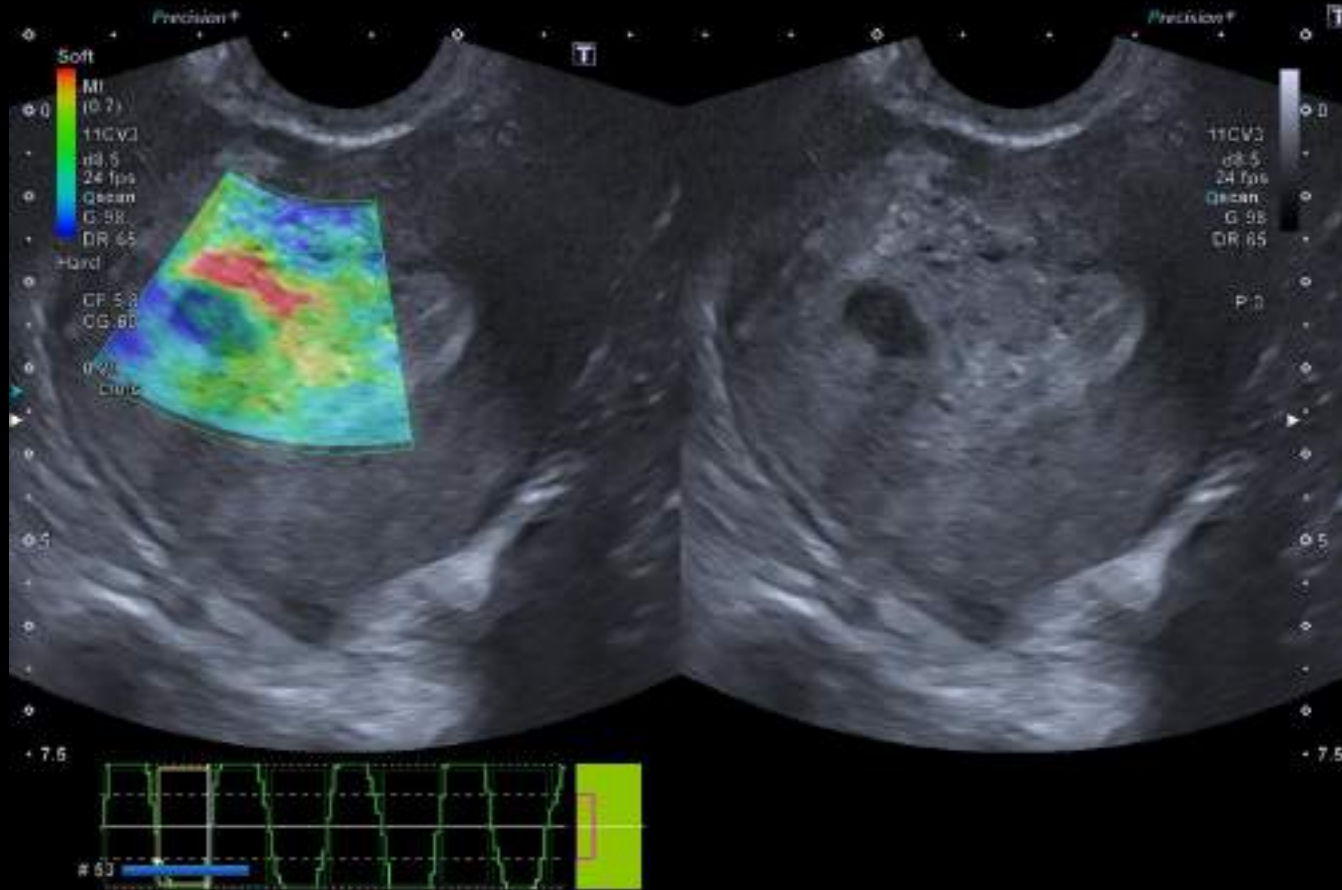
Sphincter, Urethra, Vagina

MultiView C-plane

C-plane reconstruction shows the symmetry of the muscles allowing good patient management.

Strain Elastography

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Women's Health range



PVT-681MVL (11CV3)



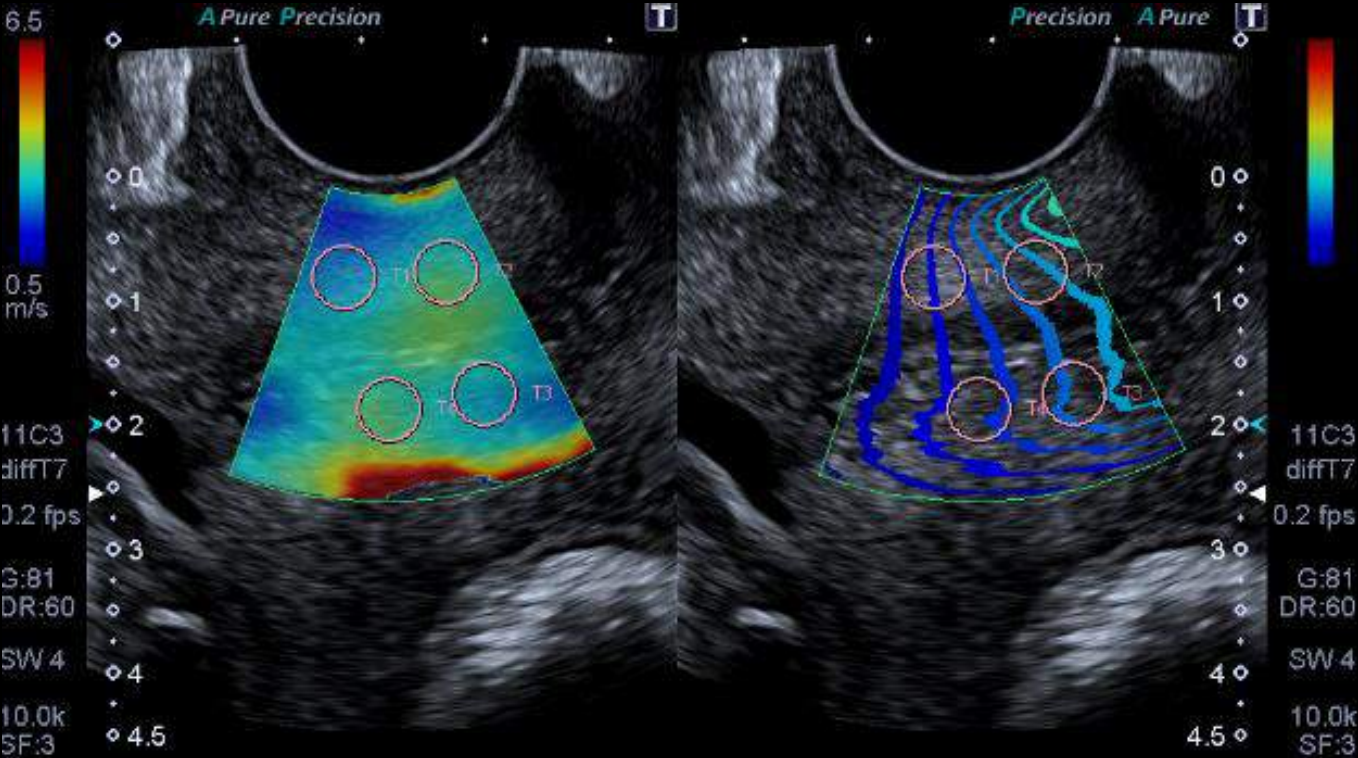
Uterus with small intracavitary fibroid

Strain Elastography

Slight manual compression offers information on tissue stiffness. The intracavitary fibroid is clearly harder than surrounding tissue and therefore presented in blue.

Shearwave Elastography

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Ave.T1	2.32 m/s	SD.T1	0.16 m/s	Ratio1	
Ave.T2	3.11 m/s	SD.T2	0.24 m/s	Ratio2	
Ave.T3	2.64 m/s	SD.T3	0.14 m/s	Ratio3	
Ave.T4	3.21 m/s	SD.T4	0.13 m/s	Ratio4	

PVT-781VT/E (11C3)



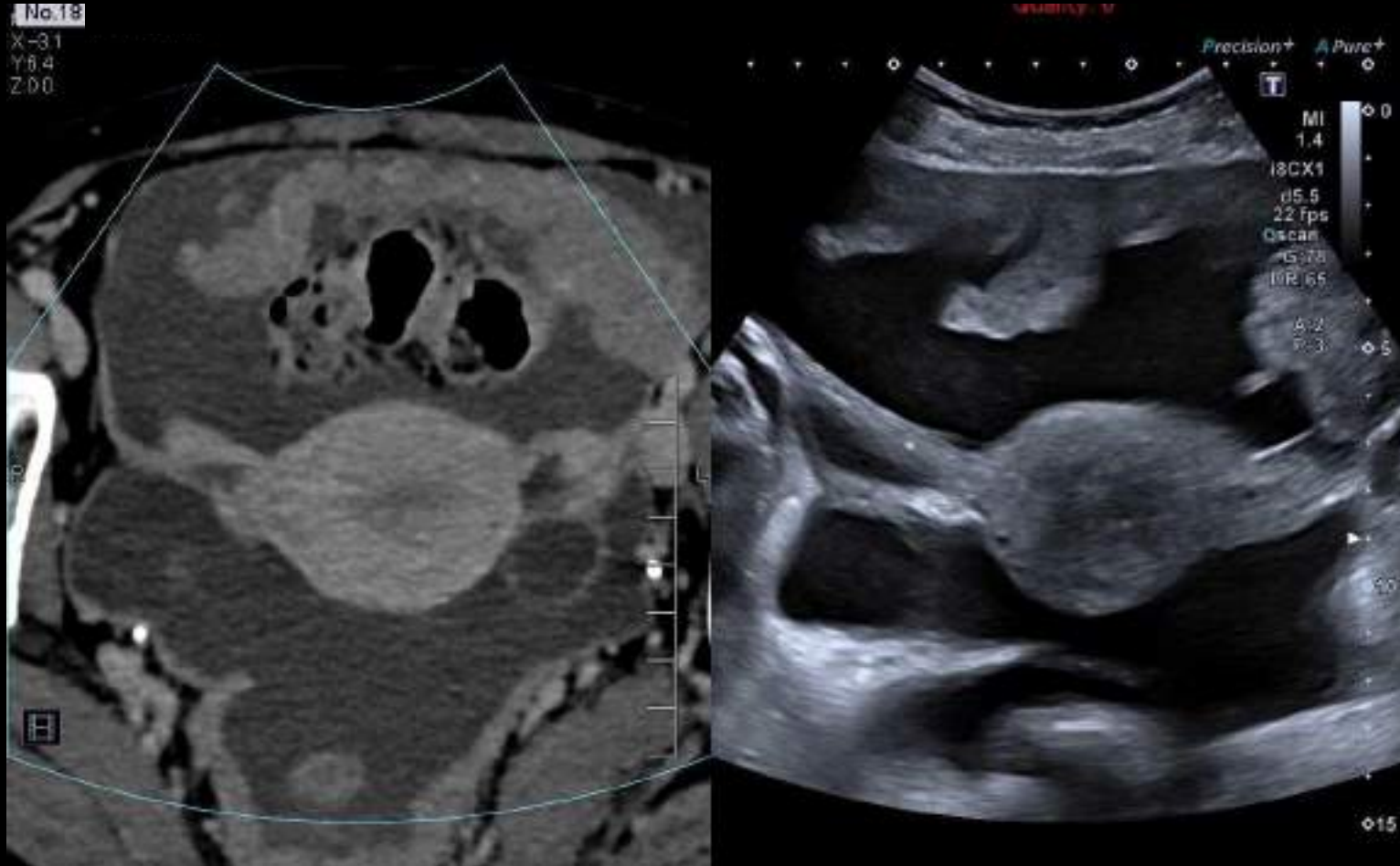
Cervix during pregnancy

Shearwave elastography with propagation map and measurements

The stiffness of the cervix can be quantitatively determined with the help of shearwave. No manual compression is needed.

Smart Fusion Imaging

Aplio
Women's Health range



PVI-475BX (8CX1)



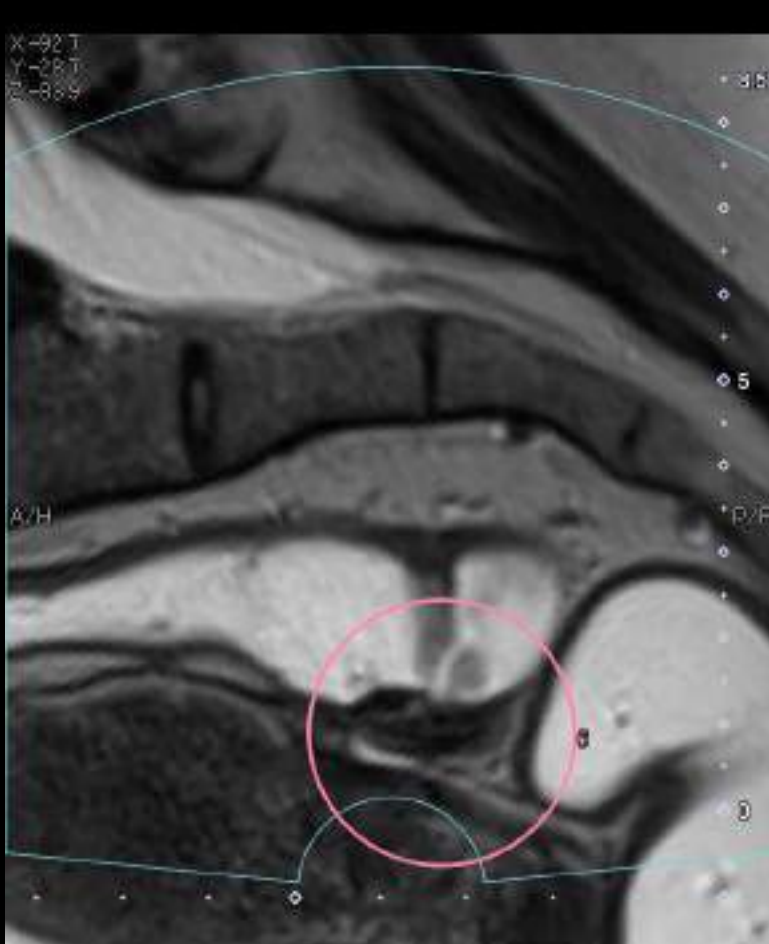
Ascites in case of pelvic lesion

Smart Fusion

The ultrasound image is fused with the CT image allowing accurate orientation in realtime for difficult to find lesions.

Smart Fusion Imaging

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PVT-781VT/E



Endometriotic lesion

Smart Fusion Imaging

The endometriotic lesion can be identified easier with the help of the fused MR image and followed up by ultrasound.



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