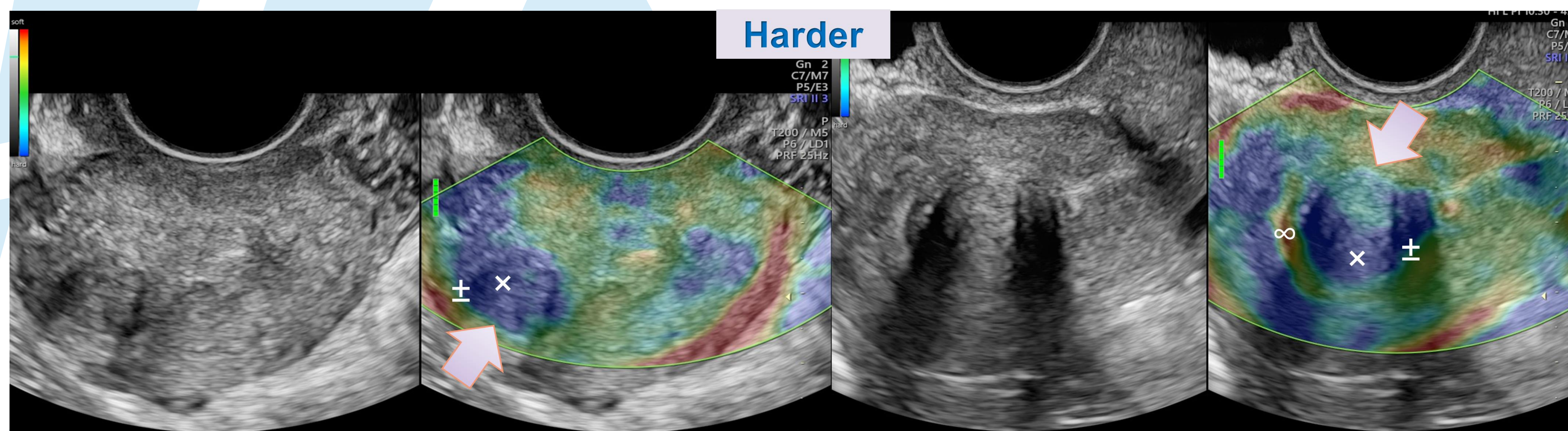


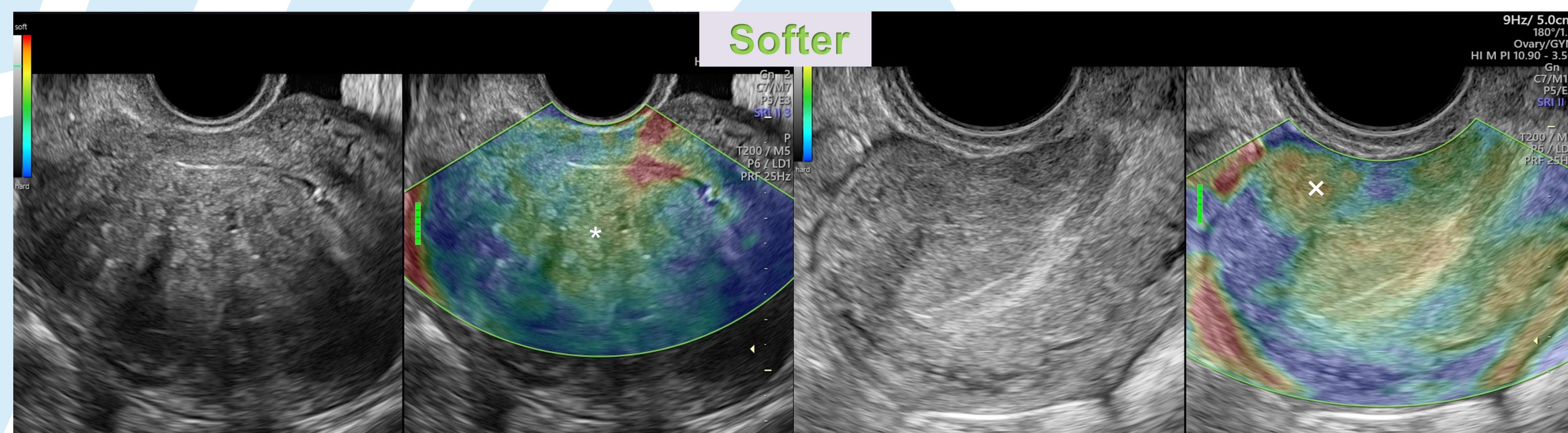
# Added value of strain sono-elastography in the diagnosis of uterine pathology: an explorative descriptive case series.

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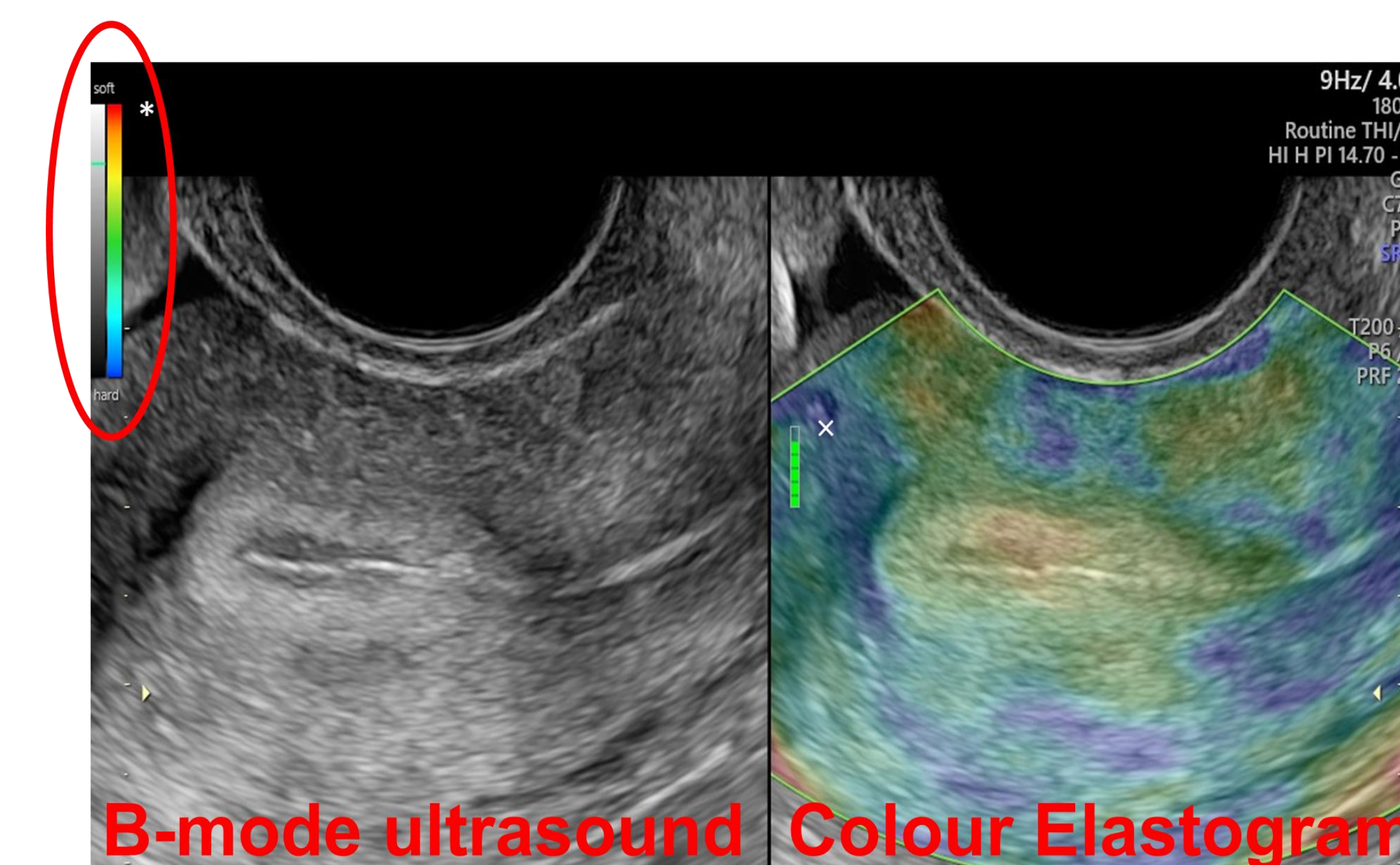
**INTRODUCTION:** Ultrasound strain sono-elastography assesses tissue stiffness, adding supplemental information to real time dynamic transvaginal ultrasound. Stiffness shows as a color quantitative elastogram superimposed on a B-mode image. The aim is to explore the added value of strain sono-elastography in the evaluation of uterine lesions.



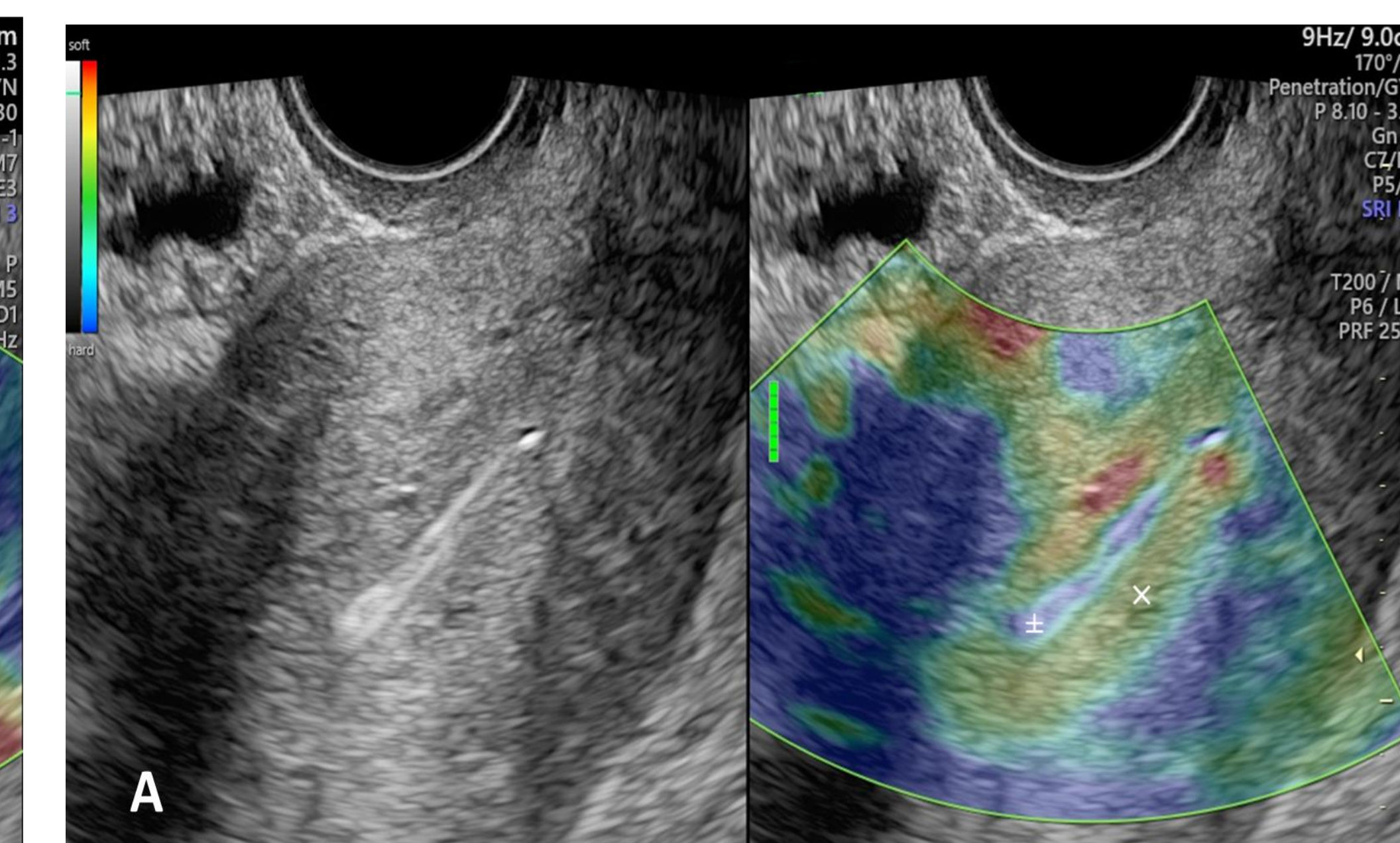
**FIGURE 3:** Fibroids: generally well defined harder (blue) lesions (X). The light blue rim around the fibroids is the softer fibroid capsule (±). The elastogram highlights the softer endometrium surrounding the fibroid, indicating it is intracavitary lesion (∞)



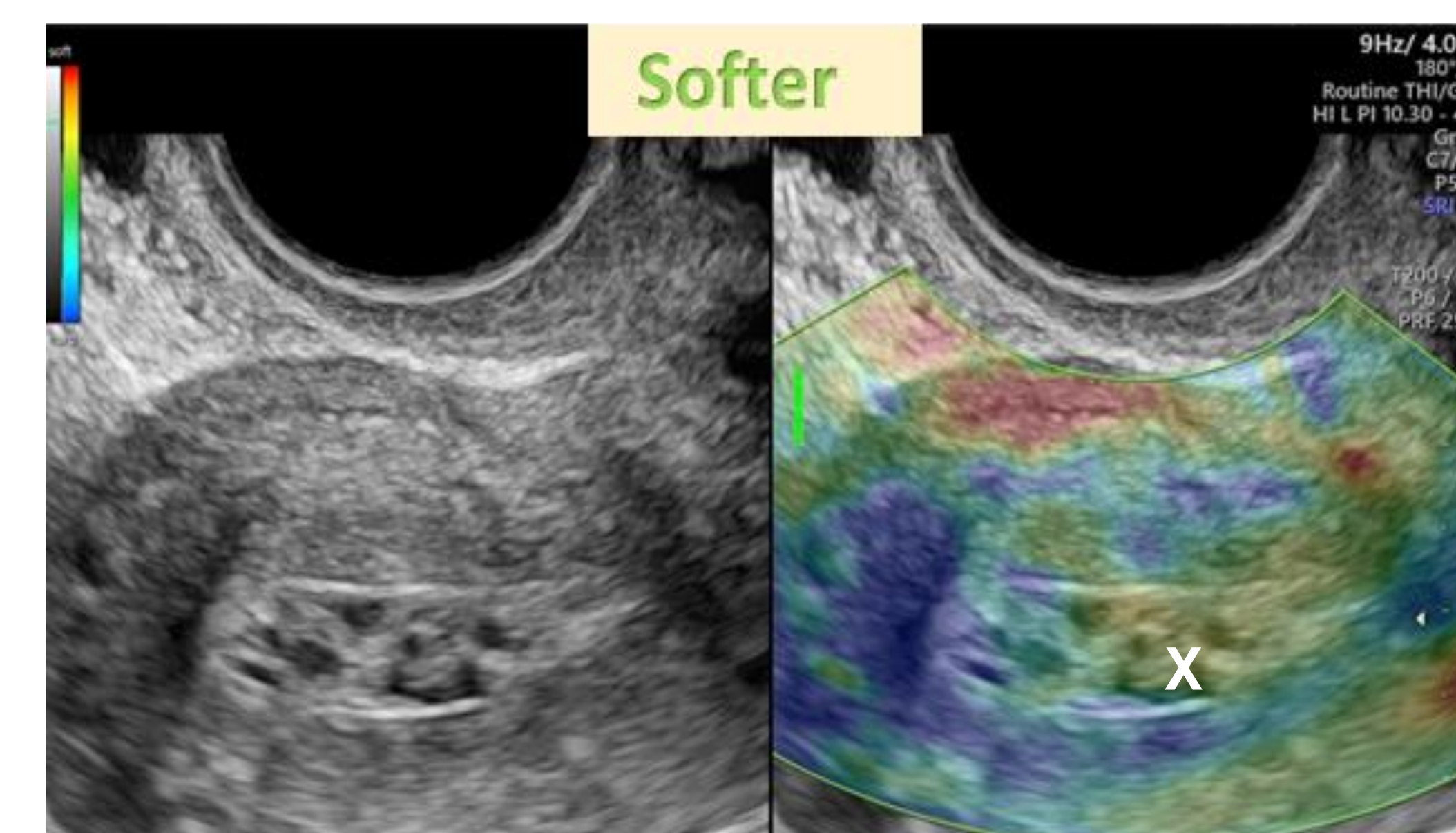
**FIGURE 4:** Adenomyosis mostly shows as a heterogeneous, ill delineated lesion (\*), generally softer (red to green) than the surrounding myometrium (dark green to blue). Yet it can be well defined in some cases of focal adenomyosis (X)



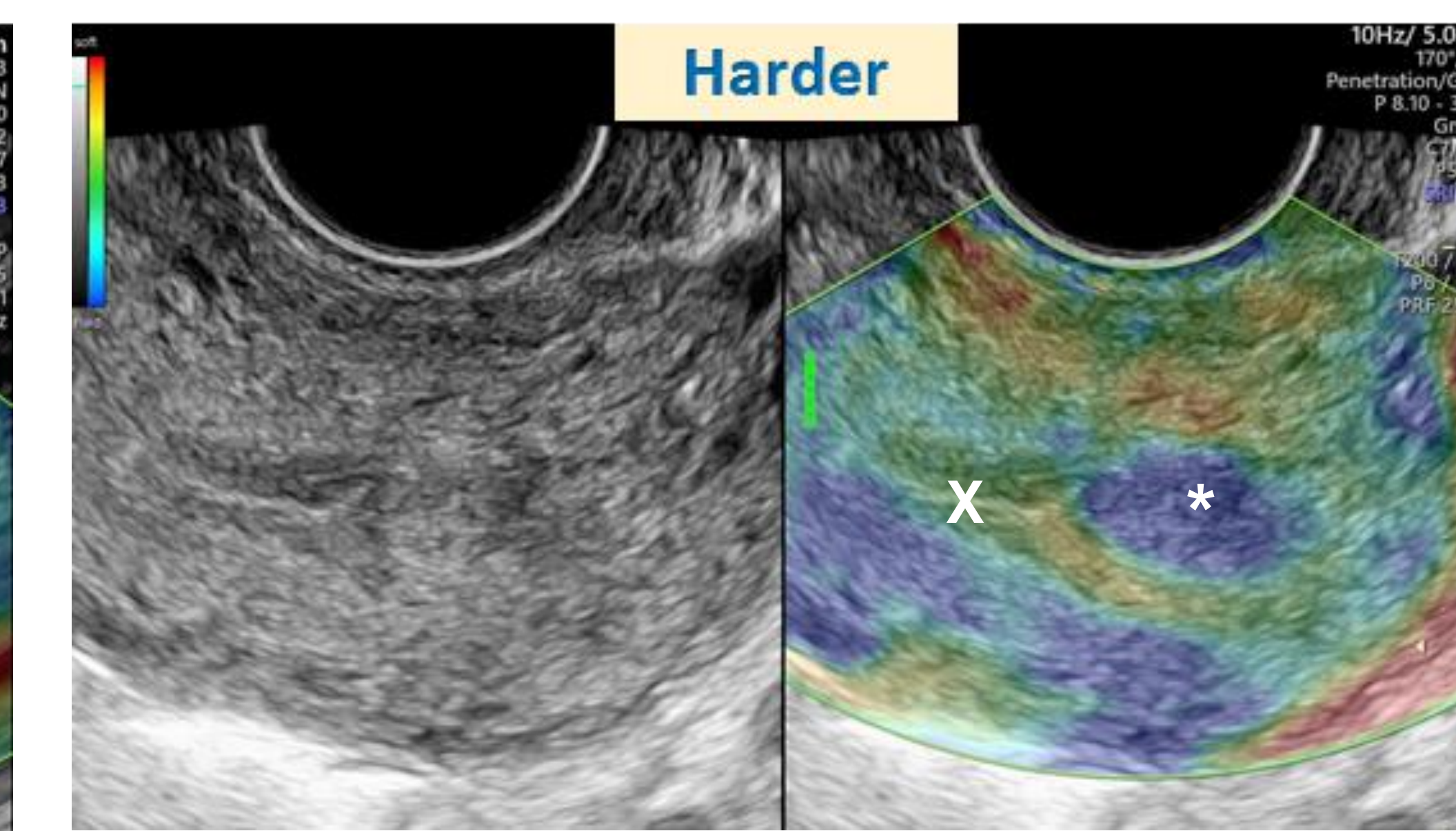
**FIGURE 1:** B-mode ultrasound image on the left and on the right a superimposed colour elastogram. Harder tissue is blue, softer tissue red.



**FIGURE 2:** Illustration of the mechanism: a hard (blue) levonorgestrel intra-uterine device (±) inside a soft (yellow/red) endometrium (X).



**FIGURE 5:** Polyps present as homogeneous softer intracavitary lesions (green-yellow) (X).



**FIGURE 6:** Retained products of conception are harder (blue) intracavitary lesion (\*). The endometrium is softer (X)

**CONCLUSION:** Strain sono-elastography may proof of added value in the detection and differential diagnosis of myometrial and intracavitary lesions. Pattern recognition of the colour map may proof more useful in clinical practice than semi-qualitative calculations. The diagnostic benefit for uterine lesions needs to be assessed in further studies.