Noninvasive prenatal testing and fetal sonographic screening roundtable discussion
Lee W, Yagel S, Cohen, SM, Benacerraf BR, Cuckle H, Kagan KO, Van den Veyver I, Wapner R. J Ultrasound Med 2015; 34 (3): 363–69.
Seven leading clinicians from Israel, USA, England and Germany were sent 10 questions about non-invasive prenatal testing (NIPT) and their responses were summarised. As might be expected, there was no universal agreement. The discussion points and rebuttals were, for me, the most interesting parts of the paper. Cost factors, ethical considerations, integration of NIPT screening into current programmes, were all addressed.
Anyone involved in local programmes would benefit from reading the report of this roundtable discussion.

Deep infiltrating endometriosis of the bowel wall: the comet sign
Benacerraf BR, Groszmann Y, Hornstein MD, Bromley B. J Ultrasound Med 2015; 34 (3): 537–42.
As most deep infiltrating endometriosis is still not detected sonographically, several groups in Australia and elsewhere have reported special techniques to enhance visualisation. These include pre-scan bowel preparation, upper vaginal or rectal gel placement, sliding sign evaluation and 3-dimensional ultrasound, to look for bowel wall lesions.
This paper describes a retrospective review of 14 patients with proven extensive endometriosis. Ultrasound detected typical focal tubular lesions with irregular margins and in most a thinner section at one end resembling a comet with its tail.
The value of this preliminary report is to make us think of adding an evaluation of the rectosigmoid wall in the cul-de-sac as well as checking the mobility of the uterus within the cul-de-sac, especially when we have a patient presenting with pelvic pain.

Diagnostic performance of contrast-enhanced ultrasound for ovarian cancer: a meta-analysis
Wu Y, Peng H, Zhao X. Ultrasound Med Biol 2015; 41 (4): 967–74.
The hunt continues for sonographic ways of pre-operatively differentiating benign from malignant ovaries. This Chinese study is the first meta-analysis of the use of contrast-enhanced ultrasound (CEUS) to this end.
Ten studies with 579 tumors were identified. The pooled sensitivity, specificity and diagnostic odds ratio statistics were 0.89, 0.91 and 91.70 respectively indicating a high diagnostic accuracy in the differentiation of malignant from benign tumors of the ovary.
These intravascular contrast agents improve the identification of the early microvascular changes associated with early-stage ovarian cancer.
Larger studies, preferably prospective and multicentred, are now needed.

Biparietal/transverse abdominal diameter ratio ≤ 1: potential marker for open spina bifida at 11–13 week scan
Simon, EG, Arthuis, CJ, Haddad, G, Bertrand P, Perrotin F. Ultrasound Obstet Gynecol 2015; 45 (3): 267–72.
We all know how difficult it can be to diagnose open spina bifida in the first trimester.
These French workers did a retrospective analysis of 20,551 first trimester scans between 11 and 13 weeks gestation to assess the performance of the Biparietal Diameter (BPD) in relation to the transverse abdominal diameter (TAD) as a screening tool for open spina bifida.
A BPD ≤ 5th percentile enabled the prenatal detection of 46.2% of spina bifida cases while a BPD/TAD ratio of ≤ 1.00 identified 69.2% of cases.
The combination of the two measurements revealed a false-positive rate of 0.6%.
We do not usually measure the transabdominal diameter in the 11–13 week scan. Perhaps we should consider it?

A randomized controlled trial to assess and compare the outcomes of two-core prostate biopsy guided by fused magnetic resonance and transrectal ultrasound images and traditional 12-core systematic biopsy
Baco E, Rud E, Eri LM, Moen G, Vlatkovic L, Svinland A, Eggesbø HB, Ukimura O. Eur Urol 2015 April 7. pii: S0302-2838(15)00272-9. (doi: 10.1016/j.eururo.2015.03.041).
This Norwegian study caught my attention, not only because of its scientific merit but because of a term I had not come across – “biopsy-naïve” referring to the fortunate ones who had not had a prostatic biopsy.
The authors compared the rate of detection of clinically significant prostate cancer between prostate biopsy guided by computer assisted fusion of magnetic resonance imaging (MRI) and transrectal ultrasound (TRUS) compared with 12 core random biopsy in a randomised controlled trial. Eighty-six patients were in the MRI arm and 89 in the random biopsy arm.
The rate of prostatic cancer detection was similar between the two groups so they concluded that the traditional 12-core random biopsy should be replaced by two-core MRI/TRUS targeted biopsy for detecting prostatic cancer.

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