2.6) had significant effect on SDI. HA at the time of diagnosis or occurring at any time during disease course did not contribute to mortality.

Conclusion: Lymphopenia contributes independently damage accrual in European background. Lymphopenia and thrombocytopenia at early disease appear to be independent risk factors for subsequent damage.

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THU0285

UMBILICAL ARTERIAL DOPPLER ULTRASONOGRAPHY PREDICTS LATE PREGNANCY OUTCOMES IN PATIENTS WITH LUPUS NEPHRITIS: A MULTICENTER STUDY FROM SOUTHERN CHINA

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Background: Compared with the general population, patients with lupus nephritis (LN) are still at high risk of adverse pregnancy outcomes (APOs). Umbilical artery is the last vessel upstream of the placenta and is particularly important for placental perfusion and foetal development. Increased umbilical artery resistance could be traced by Doppler velocimetry, which is frequently related to pre-eclampsia, intrauterine growth restriction (IUGR), and foetal distress. Umbilical artery Doppler is used as a screening tool for placenta-related diseases in the general population. However, the predictive value in complications of LN pregnancies has not been widely assessed.

Objectives: To investigate the fetal adverse pregnancy outcomes (APOs) and the predictive value of umbilical arterial Doppler ultrasonography in the third trimester in pregnant women with LN.

Methods: A retrospective cohort study enrolling 203 LN patients with pregnancies from 2007 to 2017 from three centers was performed. These patients received umbilical arterial Doppler ultrasound examination during 28-34 gestational weeks. Doppler velocity waveforms of the umbilical arteries were assessed with resistance index (RI), systolic/diastolic ratio (S/D) and pulsatility index (PI).

Results: Fetal APOs occurred in over half of the patients (103/203, 50.7%). Sixty-six pregnancies (66/203, 32.5%) ended with preterm births. The incidence rate of IUGR was 18.2% (37/203). Fetal distress was noted in 23 pregnancies (23/203, 11.3%). All the Doppler parameters were higher in patients with IUGR, fetal distress and composite APOs than in patients without any APOs. Patients with IUGR and fetal distress had significantly higher values of PI, RI, and S/D. It was noted that PI, RI and S/D was higher in patients with premature delivery than those with full-term delivery. However, only the difference of RI and S/D reached statistical significance. RI indicated the highest risk of IUGR and composite APOs. The cut-off values were 0.66 and 0.67, respectively. Sensitivities were 51.4% and 33.7%, and specificities were 87.4% and 92.1%. S/D was also a best predictor for IUGR, with the optimal cut-off value of 2.88. Sensitivity and specificity were comparable with RI. PI over 0.84 was an ideal indicator for fetal distress with an optimal combination of sensitivity (89.5%) and specificity (51.6%).

Conclusion: Fetal complications were frequent in patients with LN. Umbilical arterial Doppler ultrasonography was a useful measure to predict late IUGR, fetal distress, and the composite APOs.

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17. Vasculitis

THU0286

MANAGEMENT OF TAKAYASU ARTERITIS: A SYSTEMATIC LITERATURE REVIEW INFORMING THE 2018 UPDATE OF THE EULAR RECOMMENDATIONS FOR THE MANAGEMENT OF LARGE VESSEL VASCULITIS

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Background: European League Against Rheumatism (EULAR) recommendations on large vessel vasculitis (LVV) management were published in 2009.¹ However, given recent advances, especially in therapeutics, an update was needed.

Objectives: To collect available evidence on management of LVV to inform the 2018 update of the EULAR management recommendations.

Methods: Two independent systematic literature reviews (SLRs) were performed, one focused on diagnosis and monitoring and the other on drugs and surgical treatments. Using a predefined PICO strategy, Medline, Embase and Cochrane databases were accessed, and eligible papers reviewed. This abstract reports the main results for Takayasu arteritis (TAK). Results on giant cell arteritis (GCA) are presented elsewhere.

Results: A total of 283 articles were selected from the SLRs. Relevant heterogeneity precluded a meta-analysis.

The clinical pattern of TAK disease may differ according to age and gender. Males appear to have more complications than females. The presence of major complications (e.g. aneurysm formation), a progressive disease course and a weaker inflammatory response appear to relate to a more unfavorable prognosis, with survival rates as low as 43% at 15 years after diagnosis. Thus, follow up is essential, but there is no good quality evidence regarding the best timing and methods for disease monitoring.

High-quality evidence to guide the treatment of TAK was not found. Glucocorticoids (GC) are widely accepted as first line treatment. However, many patients require doses above 10 mg prednisolone per day for disease control. Conventional immunosuppressive drugs and TNF-inhibitors appeared to be beneficial in case series and open-label studies, but high-quality evidence for their use is lacking. Tocilizumab showed modest signs of efficacy in a randomized controlled clinical trial, although the primary endpoint was not achieved. Revascularization procedures (aneurysm/stenosis) may be required and should be performed during stages of inactive disease.

Conclusion: Evidence to guide monitoring and treatment of TAK patients is predominantly derived from observational studies with low level of evidence. Therefore, higher-quality studies are needed in the future.

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