Comparison of diagnostic efficacy of umbilical artery and middle cerebral artery waveform with color doppler study for detection of Intrauterine Growth Restriction.

K Sachin, P Umesh C, B Shazia, B Samarjit, B Amrag. JOGI, July-August 2013

Intrauterine growth restriction is associated with increased perinatal mortality and morbidity, possibly extending also in adult life, as compared to fetuses and newborns presenting characteristics of normal growth. The present study had been planned to measure the pulsatility index (PI) and resistive index (RI) of the middle cerebral artery with pulsatility index of the umbilical artery in predicting fetal growth restriction.

A total of 60 pregnant women with a clinical history and grayscale-screen patient were taken for Doppler analysis, and a final comparison of accuracy of Doppler indices was done with perinatal outcome.

The umbilical artery PI had maximum sensitivity at the third visit (32-37 weeks) and maximum specificity also at the third visit (32-37 weeks). The umbilical artery resistive index had maximum sensitivity at the second visit (28-32 weeks) and maximum specificity at the third visit (32-37 weeks). The MCA PI had a overall diagnostic accuracy of 52.8%. Umbilical artery PI has the maximum overall diagnostic accuracy of 75%.

The PI of the umbilical artery was more sensitive than the PI of the middle cerebral artery.

The Efficacy and Safety of Neoadjuvant Chemotherapy in Treatment of Locally Advanced Carcinoma Cervix.

S Uma, A Neetu, R Kumari, S Nisha, S Pushp lata, Q Sabuhi. JOGI, July-August 2013

The aim of the study is to assess the efficacy and safety of neoadjuvant chemotherapy in the treatment of locally advanced carcinoma cervix.

It is a prospective cohort study in a teaching hospital. Neoadjuvant chemotherapy in the form of cisplatin 75 mg/m² and paclitaxel 135 mg/m² on day one and repeated at 14 days interval for up to a maximum of three courses was used.

Neoadjuvant chemotherapy in cervical cancer was effective in the downstaging of the disease. Downstaging was observed in 19.23% of patients after two cycles and in 50% of patients after three cycles of NACT. Operability increases to 33.3 and 38.4% after two and three cycles of NACT respectively. Complete pathological response was observed in 37.5% of patients after NACT. No significant adverse effect in the feasibility of surgery was observed.

The neoadjuvant chemotherapy was found to be an effective and well-tolerated mode of therapy with significantly less morbidity and mortality for locally advanced carcinoma cervix.

Assessment of Osteoporosis in Post Menopausal Women: A Clinical Study

R Najam, N Huda


Osteoporosis is a metabolic disorder of the bones that is characterized by decreased bone density which predisposes to increased fracture risk. The disease can exist undiagnosed for a long time as it produces no distinct symptoms and is detected when a fracture has already occurred. The objective was to assess osteoporosis in postmenopausal women by measuring bone mineral density (BMD).

This was a cross-sectional study, conducted at the Department of Obstetrics and Gynecology, Teerthanker Mahaveer Medical College, Moradabad. India. Post menopausal women were included in the study. Women who had undergone hysterectomy or who were on hormone replacement therapy or calcium or vitamin D preparations were excluded from the study. The participants underwent BMD measurement by Achilles Ultrasound bone densitometer. The results of BMD were analyzed on the basis of T-Scores and were represented in the form of a graph.

Of the 90 patients that were included in the study 42.2% (n = 38) were in the age group of 45-55 years. In almost 50% of patients the duration of menopause was 6-10 years. Of the 90 patients 10% (n = 9) were normal, 44.4% (n = 40) were osteopenic, 33.3% (n = 30) were osteoporotic and 12.2% (n = 11) were severely...
osteoporotic. Backache was the commonest presenting symptom in the study population.

Quantitative ultrasound (QUS) is a rapid and inexpensive method of measuring bone density. In this study 90% of the postmenopausal women had subnormal T scores. It is recommend regular BMD measurements in postmenopausal subjects should be done for early diagnosis and treatment of osteoporosis in this vulnerable group.

**Balloon tamponade during cesarean section is useful for severe post-partum hemorrhage due to placenta previa**

T Ishii, K Sawada, S Koyama, A Isobe, A Wakabayashi, T Takiuchi, T Kanagawa, T Tomimatsu, K Ogita, T Kimura


Severe post-partum hemorrhage during cesarean section due to placenta previa is still one of the leading causes of maternal mortality. The aim of this study was to evaluate the efficiency of intrauterine tamponade with a Sengstaken-Blakemore tube (SB-tube) for the treatment of severe post-partum hemorrhage in cases of placenta previa.

Data were collected from departmental clinical records on all patients who underwent caesarian section due to placenta previa between 2007 and 2009.

During the period analyzed, 37 patients underwent caesarian section due to placenta previa/low-lying placenta. Four (11%) underwent hysterectomy due to placenta accreta and 33 (89%) were treated conservatively. Of the 33 patients with conserved uterus, 10 (28%) patients required a SB-tube during the cesarean section because of continuous post-partum hemorrhage despite appropriate medical treatment. The median bleeding during the operation was 2030 ± 860 mL in the patients who used SB-tube. None of them presented severe complications related to these procedures or required any further invasive surgery.

Intrauterine balloon-tamponade could successfully control severe hemorrhage from a lower uterine segment of a patient with placenta previa. This technique is simple to use, scarcely invasive, and available at a low cost to all maternity wards, and should be considered as one of the first management options to reduce the risk of undesirable hysterectomy.

**Pre-eclampsia is associated with, and preceded by, hypertriglyceridaemia: a meta-analysis**

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Elevated triglycerides are a feature of the metabolic syndrome, maternal obesity, maternal vasculitis (i.e. systemic lupus erythematosus) and diabetes mellitus. These conditions are all known risk factors for pre-eclampsia. Hypertriglyceridaemia therefore may be associated with pre-eclampsia and indeed this may precede the presence of overt disease.

To determine the association between hypertriglyceridaemia and pre-eclampsia in pregnant women, MEDLINE, EMBASE, Web of Science, Excerpta Medica Database, ISI Web of Knowledge, Cumulative Index to Nursing and Allied Health Literature, Cochrane Library from inception until June 2012 and reference lists of relevant studies was searched.

Two reviewers independently selected studies on pregnant women where triglycerides were measured and women were followed up until the development of pre-eclampsia or selected on the basis of presence of pre-eclampsia and compared with controls.

Data collected and meta-analysed the weighted mean differences (WMDs) of triglyceride levels from individual studies using a random effects model.

There was strong evidence from meta-analysis of 24 case–control studies (2720 women) that pre-eclampsia is associated with higher levels of serum triglycerides (WMD 0.78 mmol/l, 95% confidence interval 0.6–0.96, \( P < 0.00001 \)). This finding is also confirmed in five cohort studies, that recruited 3147 women in the second trimester before the onset of pre-eclampsia or selected on the basis of presence of pre-eclampsia and compared with controls.

Hypertriglyceridaemia is associated with and precedes the onset of pre-eclampsia. Further research should focus on defining the prognostic accuracy of this test to identify women at risk and the beneficial effect of triglyceride-lowering therapies in pregnancy.