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The recurrent miscarriage clinic (RMC): an analysis of the new case referrals for 2008

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Aims: An analysis of the new case referrals to the Recurrent Miscarriage Clinic during the year 2008.

Methods: The aims of the Recurrent Miscarriage Clinic (RMC); at Mater Dei Hospital, Malta are to investigate patients with a history of recurrent miscarriage, with a view to making a diagnosis and advising on appropriate treatment. The report looks at the new case referrals to the RMC during the year 2008. It gives an insight to the demographics, hormonal, chromosomal, anatomical, autoimmune status and obstetric and gynaecological history of the patients that attended the RMC for the first time during 2008.

Results: In total there were 44 new case referrals; 11.4% of which had serological markers of Primary Antiphospholipid Syndrome, 25% had low luteal phase serum progesterone levels (a feature of Luteal Phase Dysfunction and Polycystic Ovary Syndrome) and the most significant finding was that of the new cases referred nearly 50% had a mutated MTHFR gene to some degree or other.

Conclusions: The analysis is the first report on the caseload referred to the clinic in one year. The average number of new cases in the last 5 years has been 45 so this should be the expected annual caseload for the Miscarriage Clinic. This information will help to improve the service given to patients and to further broaden the understanding of this distressing condition in our own local setting.
Obstetric outcomes in women originating from the Sahel belt and Horn of Africa regions

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Aims: This study sets out to compare the obstetric outcomes of African-nationals coming from the Sahel belt and Horn of Africa regions and delivering in Malta during 1999-2007 to the obstetric outcomes registered in the general population delivering in the Maltese Islands [n = 35724] during the same period.

Methods: The obstetric data of three subgroups of women - Group 1: those from the Sahel belt [n=83] and the Horn of Africa [n=56]; and Group 2: the overall population registered for the Maltese Islands were obtained using the computerized National Obstetric Information System during the period 1999-2007 [maternities = 35825; births = 36251].

Results: The African group of women from both regions were statistically younger than those in the general population [p=0.0001]. They also appeared more likely to be multiparous [p=0.009]; and were more likely to have experienced a previous perinatal death [p=0.004]. Both African groups were statistically more likely to suffer from blood-borne infections [p<0.0001]. They did not appear to have any evident increase in medical and obstetric complications. The African women had lower obstetric intervention rates [p=0.02] but higher Caesarean section deliveries [p=0.006]. Infants born to African women were more likely to be premature [p=0.046]. This did not appear to contribute to statistically significant infant adverse outcomes.

Conclusions: Women originating from the Sahel belt and Horn of Africa regions present socio-biological and cultural differences which can contribute towards adverse obstetric and perinatal outcomes.

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Lowest threshold values for the 75g oral glucose tolerance test in pregnancy

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Aims: A previous study has suggested that with increasing oGTT thresholds there was a statistically increasing risk of maternal and foetal morbidity in the form of hypertensive disorders complicating pregnancy (10.7% in 2-hour oGTT values of 8.0-8.5 mmol/l to 13.2% for values of 8.6-10.9 mmol/l and 22.4% in GDM), and macrosomia (7.9% to 9.4% to 14.3%). The present study aims to identify whether this gradient the risk is extant with lower blood glucose values.

Methods: A total of 1289 75-gm oGT Ts were performed during pregnancy. These were divided according to their fasting and 2-hour values into categories: A. Fasting values - <=4.5 mmol/l [n = 316], 4.6-5.5 mmol/l [n = 681], and >=5.6 mmol/l [n = 292]; and B. 2-hour values - <=6.5 mmol/l [n=453], 6.6-8.5 mmol/l [n = 433], 8.6-9.5 mmol/l [n = 176], and >=9.6 mmol/l [n=208]. The incidence of hypertensive disease during pregnancy, the macrosomia rate, and the mean birth weight were assessed in each group.

Results: The data confirms that a significant rise in the incidence of hypertensive disease occurs at a fasting blood glucose value is >=5.6 mmol/l, while the macrosomia rate rises after >=4.6 mmol/l. The mean birth weight increased progressively with increasing fasting blood glucose thresholds. There is furthermore a progressive rise in the incidence of hypertension noted with significance being reached at a 2-hour blood glucose value greater than 9.6 mmol/l. However no such relationship appears to be present for the incidence of macrosomia; and there was no significant differences in mean birth weights with increasing 2-hour post-load glucose levels.

Conclusions: The study suggests that fasting blood glucose values may be a better indicator of maternal and foetal adverse risk outcomes with increased adverse foetal outcomes being indicated at levels >=4.6 mmol/l. The 2-hour post-75g oGTT values appear to be useful as adverse risk indicators only at levels >=9.6 mmol/l. The study suggest that the current ADA diagnostic criteria for the 75g oGTT [Fasting >=5.6; t-1hr >=10.0; 2-hr >=8.6 mmol/l] may truly reflect the lowest limits for prognostic value, though the fasting value may need to be revised.
who gave a history of multiparity [para 3+: OR = 1.56: p=0.008] or previous recurrent miscarriage [OR = 1.79: p=0.008] or foetal loss [OR = 3.17: p<0.0001]. The current pregnancy was statistically more likely to be a multiple pregnancy [OR = 13.52: p<0.0001] or be complicated by hypertension [OR = 2.62: p<0.0001], pre-existing [OR = 7.5: p<0.0001] or gestational [OR = 2.4: p<0.0001] diabetes, or antenatal bleeding [OR = 9.22: p<0.0001]. Premature births were statistically more likely to deliver by Caesarean section [OR = 2.13: p<0.0001]. The stillbirth and neonatal mortality is significantly higher [OR = 73.0: p<0.0001] in premature births; while the premature infant is very much more likely to require resuscitation and life support interventions [low 5 min Apgar score: OR = 36.5: p<0.0001]. The neonatal period of the premature infant is fraught with risks of significant serious complications such as respiratory distress syndrome [OR = 9.14: p<0.0001], hyperbilirubinaemia [OR = 16.0: p<0.0001], and sepsis [OR = 16.0: p<0.0001].

Conclusions: The short-term morto-morbidity and long-term morbidity associated with preterm births necessitate a determined drive to identify those pregnant women at risk so that proactive intervention management can be instituted.

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Risk factors for premature births in the Maltese population
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Aims: A review of the epidemiology and the short-term complications arising from natural or iatrogenic prematurity in modern practice is necessary to assess the true import of this obstetric complication.

Methods: All deliveries with known gestational age at delivery in the Maltese Islands during the period 1999-2006 were included in the study [23073 maternities with a total of 23422 births]. These maternities included a total of 1279 delivered at a documented 36 or less completed weeks of gestation.

Results: During the period under review the prematurity rate amounted to 6.2% of all maternities. Iatrogenic-induced births accounted for 33.9% of the total. A premature birth was statistically more likely to occur in women at their extremes of reproductive life [<=17 years: OR = 1.16; or >=30 years: OR = 1.44: p<0.0001], or...
School of Health Sciences, University of Nottingham, UK, 2Edith Cavell countries submitted data for 2008. Data by age-group, diagnosis 2010.

epidemiology of measles in relation to the goal of elimination by more than 20 years ago. Our aim was therefore to review the same population did however report a high percentage of alcohol regularly and the majority included healthy food in their diet. The lifestyle choices. A very low percentage was observed to smoke on a regular basis, a high percentage carry out physical activity, half the respondents carry out more than 1 hour reporting no physical activity at all. Of those who reported practicing physical activity, 37% reported consuming fast food at least once a week. 37% reported consuming fast food at least of respondents (97%) reported consuming vegetables and fruit at least (n=247) reported regular consumption of alcohol. The majority by Europe (23.1%). A considerable amount of students 84.6% smoked cigarettes and 11.3% reported smoking marijuana under survey.

Aims: To explore the lifestyle choices of medical students on an international basis. To elicit the physical activity, smoking habits, alcohol consumption and nutritional intake of medical students from the five regions as demarcated by the WHO.

Methods: A questionnaire was given to each of the 500 delegates attending an international medical student conference in August 2009 in Macedonia. The respondents were asked questions on their demographics, physical activity, smoking habits, alcohol consumption and nutritional intake of medical students on an international basis. To elicit the physical activity, smoking habits, alcohol consumption and nutritional intake of medical students from the five regions as demarcated by the WHO.

Results: Data entry errors, from the NOIS sheet to the computerised database were found in only 4 cases for the 3 months’ data. When NOIS datasheets were then crosschecked with the “Babies Book”, discrepancies were found for all months but were greatest (41) for the month of July. On examination of the files of the 41 discordant cases in July it was found that: NOIS datasheet...
In all instances, the major reason for discrepancy was a recording of delivery as spontaneous onset when the audit impression was induction by prostaglandins. Overall, out of the total of 293 deliveries for July 2008, 27 (9.2%) of NOIS sheets ultimately disagreed with the audit results.

**Conclusions:** Discrepancies occurred mostly when the delivery was induced by prostaglandins as this is not captured on the partogram. Documentation of prostaglandin induction on the partogram could improve accuracy in data collection. Other inaccuracies may be present such as artificial rupture of membranes in early labour being misclassified as induction, in order to identify all such situations it would be necessary to review all case notes. The DHIR and the Department of Obstetrics, are working in collaboration on amending the current partogram to address these issues.
A natural hip protector against postmenopausal hip fracture - fat pad thickness at hip in various groups of women.

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Aims: The measurement of the fat pad at the point of greater trochanter in various groups of women.

Methods: One hundred and sixty-two women were recruited sequentially to have the thickness of the fat pad at the level left lower limb's greater trochanter measured ultrasonically. Sixty-two women were young menstrual (under the age of 35 years) while there were 25 women in the older menstrual group (35+ years). The other groups included perimenopausal women (17) and hormone treated (30) and untreated postmenopausal women (28). The woman would be placed on the right flank with both lower limbs extended. The greater trochanter would then be palpated and a 3.5 MHz ultrasound sector probe Aloka (SD 500) would be placed at right angles to the point where the trochanter could be felt. Under the sonolucent subcutaneous tissue, a "\" shaped hyperechoic shadow could be seen representing the greater trochanter and is consistently noted to be thinnest point of outer cortical bone in this region. At this point the edges of the skin and subcutaneous tissue till the outer hyperechoic cortical layer of the trochanter could be clearly defined.

Results: The lowest fat pad thicknesses were registered for the untreated menopausal group (2.04 +/-0.69 cm), the perimenopausal group (2.06 +/-0.86 cm) and young menstrual group (2.09 +/-0.64 cm). The oestrogen-replete group were consistently higher - old menstrual group and 2.3 +/- 0.76 cm respectively and 2.33 +/-0.72 cm in the hormone treated group. These differences did not reach statistical significance except between the hormone treated group and the untreated postmenopausal group. However significant correlations were noted between the fat pad thickness and trochanteric cortical thickness all groups of women.

Conclusions: Low thicknesses of the fat pad at the trochanter were found in the menopausal and perimenopausal women. Moreover significant correlations were found between the trochanteric cortical thickness and the fat pad. A coupling mechanism may exist between the trochanteric cortical thickness and fat pad which may influence risk for fracture at the neck of femur. The fat pad may be a natural hip protector.

The effect of a marine alga Padina pavonica on Maltese menopausal women

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Aims: Padina pavonica (Pp) is a brown marine alga capable to deposit calcium on its fronds. It increases the ability of osteoblast in cell culture to fix calcium.

To investigate the effect that Pp or its extract may exert on bone mineral density (BMD) in postmenopausal women suffering from osteopenia or osteoporosis.

Material and Methods: Phase I. 40 postmenopausal women were recruited and randomised into four groups, having 0 mg, 200mg, 400mg, 600mg/daily of the lyophilised Pp. The change in BMD after 12 months of treatment was measured. The change in bone turnover markers was also assessed after 3 months of treatment.

Phase II another 40 menopausal women were recruited and randomised into two equal groups one having Pp Extract (200mg) and Calcium Carbonate (450mg) the other only Calcium. The change in BMD was assessed after 12 months of treatment.

In Phase III, 30 menopausal women where into two equal groups, one group was given 200mg lyophilised Pp while the other acted as controls. BMD change was assessed after 12 months.

Phase IV, forty menopausal women were enrolled and randomised into two groups, one group was treated with Pp Extract (200mg) with the other group acted as controls.

Any oestrogen-like effect was monitored throughout the whole study by endometrial thickness and changes in Maturation Index of a cervical/vaginal cytology. Side effects and blood parameters were monitored every 3 months.

Results: Phase I results showed a statistically significant increase in BMD at the hip in the patients taking 200mg Pp daily (p=0.002). Those having 400mg daily had a statistically significant increase in BMD in both regions, (Lumbar spine p=0.016, Femur neck =0.028). In Phase II there was no increase BMD at either site. In Phase III the BMD increased at both sites (Lumbar spine p=0.007, Femur neck p=0.004). The BMD in Phase IV at the lumbar spine and the femur neck was also statistically significant from baseline after 12 months of treatment (Lumbar spine p=0.033, Femur neck =.024).

Conclusions: Both the extract and the lyophilised powder of Pp appears to improve the bone mineral density at the lumbar spine and at the hip.
R.4 Abnormal smear cytology correlating with HPV DNA testing and incidence of regression and persistence strains and assessment of patients' characteristics

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Aims: Carcinoma of the cervix is associated with persistent oncogenic Human Papilloma Virus (HPV) infection. The study aims to determine the incidence of HPV positivity and viral genotype prevalence and regression rates. It also assesses any correlation between patients with abnormal smear test result and their particular characteristics and demographics, including history of Sexually transmitted diseases (STDs) and CIN changes.

Methods: A retrospective study of 200 patients with a history of PAP smear abnormality were recruited. An HPV DNA test was performed to determine HPV persistence and also note clearance rate and prevalence of persistent strains.

Results: Data analysis is still being carried out.

Conclusions: Demonstration of any correlation between demographic features and other patients’ characteristics and incidence of an abnormal PAP smear result. HPV infection prevalence is determined as well as the prevalence of HPV genotypes. The findings of this study may contribute to reliable predictions or otherwise on the potential efficacy of an HPV vaccine in clinical practice.

R.5 Intermenstrual bleeding patterns in women treated with the levonorgestrel intra-uterine system

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Aims: Intermenstrual bleeding post-levonorgestrel intrauterine system insertion is the commonest reason for removal of this treatment which has been shown to be an effective method for treating menorrhagia. The levonorgestrel intrauterine system has reduced operative interventions for menorrhagia by 64% in the U.K. This study assessed intermenstrual bleeding and patient attitudes following the insertion of the levonorgestrel intrauterine system for menorrhagia.

Methods: Over a two year period, 82 patients attending an outpatient’s clinic had the levonorgestrel intrauterine system inserted and were interviewed via a telephone directed questionnaire. The questionnaire enquired about a number of variables appertaining to the levonorgestrel intrauterine system.

Results: Out of 82 patients a total of 58 women accepted to have the levonorgestrel system inserted. The majority (94%) of women had the levonorgestrel intrauterine system for menorrhagia and a just a half of these had another indication besides menorrhagia, such as endometriosis, dysmenorrhea or contraception. Two women had a spontaneous expulsion within the year of the levonorgestrel system insertion. Three women insisted on having a hysterectomy despite having the levonorgestrel system. Forty-seven women (79%) had the levonorgestrel intrauterine system inserted under general anaesthesia combined with a dilation and curettage. Intermenstrual bleeding was present in 75% of women who had a levonorgestrel intrauterine system introduced. In 81% of women the intermenstrual bleeding resolved by the fourth month post-insertion. The amount of intermenstrual bleeding was considered mild to moderate in 83% of women. Most women (59%) required hormonal treatment to control the intermenstrual bleeding. As regards re-insertion of the levonorgestrel intrauterine system 78% were strongly motivated for its re-insertion and 7% were against having a reinsertion. 82% of these women stated that they would strongly recommend the insertion of the levonorgestrel intrauterine system to a friend or colleague.

Conclusions: In this study, the majority of women noted that intermenstrual bleeding following levonorgestrel intrauterine system insertion resolved within 4 months of its insertion. The intermenstrual bleeding was amenable to hormonal support in most women recruited in this study. The majority of women would opt for re-insertion of the levonorgestrel intrauterine system and would recommend it to friends or colleagues.
New education policies in obstetrics and gynaecology – 2008/09
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Aims: Interventional changes were introduced in the educational targets in obstetrics and gynaecology during the Vth year of studies. These changes envisaged a greater emphasis on a clinical orientation of the teaching objectives with the introduction of problem-based lectures, a marked increase of small-group teaching sessions and greater emphasis on the clinical attachments. An audit of the effect of these changes on educational policies and emphasis on overall student attitudes and performance was carried out.

Methods: The analysis was based on two tools: [1] an anonymous survey of student perceptions on the various educational tools; and [2] an analysis of student performance in the final year assessment.

Results: The students’ perception of the new course emphasis and teaching ethos used was generally positive. The response rate to the anonymous questionnaire was 66.7% [40 of 59 students]. The various teaching methods used throughout the study unit designated OBG4000 were assigned a mean percentage score. The highest mean score of 92.5% was assigned to the outpatient sessions. The lowest mean score of 67.5% was assigned to the attachment with the emergency on-call team. Other aspects of the clinical attachment programme scored 77.5-90% [operating sessions 77.5%; ward round attachments 80%; Specialist Health Centre attachments 82.5%]. The taught component scored a mean score of 80-90% [lecture program 80%; tutorials 90%]. The revamped clinical logbook was assigned a mean score of 82.5%.

The increased clinical emphasis of the re-organised OBG4000 study unit structure has its effects on the final marks obtained in the end-of-year assessment. The written assessment that was designed to assess the application of attained knowledge to clinical situations showed a clear Gaussian distribution curve with the majority of students [53.3%] obtaining a C+/B-grade. There were 3 students who got an A-grade while two students obtained a D+ -grade. There were no A+, F or D-grades. In contrast, the clinical assessment showed a definite skewed distribution towards the higher grades with 40% of students obtaining an A-grade. The overall grades obtained showed a Gaussian distribution slightly skewed higher grades with seven students [11.7%] obtaining an A-grade.

Conclusions: The greater emphasis to clinical teaching is not only appreciated and welcomed by the students; but also has had a positive effect on preparing the students more effectively to deal with patients in the clinical situation. The teaching ethos of the last year of course study units [OBG4000] should aim at consolidating the theoretical knowledge learned during the earlier theory-based study unit [OBG4010] conducted during the fourth year of studies, and further allowing the students to learn to apply this knowledge in the clinical setting.
PHa 15

Pre-conception Care in Type 1 Diabetics
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Aims: The aim was to assess the level of knowledge and awareness related to pre-conception care among Maltese women with type 1 diabetes mellitus (DM) in the reproductive age.

Methods: Thirty seven women, aged 12-30 years with type 1 DM, who presented themselves at the state-managed Diabetes Clinic (recruited by convenience sampling), were administered a questionnaire related to diabetes self-management and pre-conception care. The participants participated at an education intervention and subsequently were asked to complete the same questionnaire. Patient responses before and after the intervention were analyzed using SPSS Version 16.

Results: Out of the 37 patients, 27 patients agreed to complete the questionnaire after the intervention thus giving a response rate of 73%. Before the intervention, 26 participants (70%) claimed they did not have any knowledge about the importance of diabetes care before planning a pregnancy. Of the remaining 11 patients (30%), the main reported source of information about diabetes care was the diabetologist (n=8, 67%). After the intervention, 6 participants (26%), who initially had no pre-conception knowledge, claimed that after the intervention they felt knowledgable. Eleven participants
(41%) felt that the intervention was not enough for them to change their views. When comparing the pre- and post- intervention means of knowledge of the study population (n=27), it resulted that there was an increase in mean in the majority of patients after the intervention (p=0.000).

Conclusions: There was a statistically significant difference between the knowledge of participants before and after the intervention indicating that the intervention provided led to enhanced pre-conceptional care knowledge. At the pre-intervention stage, the respondents lacked awareness on pregnancy-related complications with diabetes and the role of pre-conception counseling in preventing these complications. It is imperative for health professionals to raise these issues with their adolescent patients during routine visits.
PAD with monophasic waveforms, where the concentration of gentamicin in tissue reflects the concentration whereas patient 2 had normal triphasic waveforms. Patient 6 suffered from significant PAD with monophasic waveforms lower (2.38µg/g) to that of patient 2 (5.80µg/g) probably because concentrations (5.72 and 5.17µg/mL respectively), however the tissue concentration was lower (2.38µg/g) to that of patient 2 (5.80µg/g) probably because the time of sampling ranged from 1 to 9 hours after gentamicin administration. The serum levels ranged from 1.12 to 9.75µg/mL (mean = 4.42µg/mL), while the tissue concentration ranged from 1.43 to 9.61µg/g (mean 3.80µg/g). Of the patients who were analyzed to date, the dose of gentamicin was 240mg daily and the time of sampling ranged from 2 to 3 hours. Patients 2 and 6 had similar serum and tissue concentrations of 1.12 to 9.75µg/mL (mean = 4.42µg/mL) and 2.38 to 9.61µg/g (mean 3.80µg/g). Of the 35 patients treated with gentamicin and undergoing debridement, three patients suffered from Ischaemic Heart Disease. From the 6 patients with Peripheral Arterial Disease (PAD) and to determine whether the concentration of gentamicin present in the periphery is within the therapeutic range.

To analyse the distribution of gentamicin in patients with PAD and to determine whether the concentration of gentamicin present in the periphery is within the therapeutic range. Gentamicin was extracted from the tissue samples using Fluorescence Polarisation Immunoassay technology. Blood and tissue samples were taken from patients treated with gentamicin and undergoing debridement. Blood and tissue samples were taken from patients treated with gentamicin and undergoing debridement. These preliminary findings show that the concentration of gentamicin present in the periphery is within the therapeutic range.

Conclusions: The holy grail of clinical excellence emanates from several factors; however the interaction of clinical teacher and students is of principal importance. This interaction can take the form of mentorship during clinical teaching which may lead to a more holistically formed physician endowed with the attributes required of the “modern day good doctor”.

Clinical Teaching and the “modern day good doctor”

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Aims: There is growing awareness in the medical and lay community that being a good doctor requires more than sound medical knowledge and first-rate clinical skills. Numerous attributes are necessary to providing comprehensive care, including in particular the ability to communicate effectively with patients. A doctor is expected behave in a professional manner and simultaneously care in a humane way, giving due consideration to the cultural and spiritual background of patients’ lives. Moreover, in the Maltese perspective, patient advocacy and comprehensive social/medical education are also required of local physicians. It is becoming apparent that effective clinical teaching through example and proper instruction may go a long way to ingrain the above attributes into today’s medical students.

Methods: Exposure to real-life situations and clinical problem-based teaching are undoubtedly a superior active form of clinical teaching. With adequate guidance, the learning experience will certainly be more rewarding to all concerned - lecturer/students. Ideally clinical teaching should initiate from the first year in Medical School and continue thereafter. Sustained good clinical teaching may also strengthen the continuum between the Maltese Medical School and Postgraduate Medical Education in the direction of specialisation in either Family Medicine or Hospital Practice.

The continuum mentioned above can be strengthened by applying greater efforts at improving Clinical Medical Education. Greater attention must be directed towards medical students during the clinical years. Clinical teaching can certainly be more fruitful if it is more accountable (for both lecturer and student) and beefed up with more zest.

Results: Improved clinical teaching will endear our medical students to the Maltese Medical Service, which helps in no small way in their education. Greater acquaintance with Medical Health Service personnel and its operating modes would improve on the delivery of the clinical service. It is more likely that improved clinical teaching will engender greater loyalty towards the Maltese Health Service.

Conclusions: The holy grail of clinical excellence emanates from several factors; however the interaction of clinical teacher and students is of principal importance. This interaction can take the form of mentorship during clinical teaching which may lead to a more holistically formed physician endowed with the attributes required of the “modern day good doctor”.

Clinicians are being encouraged to think critically, and to use evidence-based medicine (EBM) as the foundation for their practice. However, there are many barriers to successful implementation of EBM. One of the most important barriers is the lack of appropriate training in EBM. This is particularly true for clinicians who are in training, as they may not have the opportunity to develop the skills necessary to effectively use EBM in their practice. The training of clinicians in EBM should be an integral part of medical education. This includes both didactic instruction and hands-on experience with the use of EBM in clinical decision-making.

There is growing awareness in the medical and lay community that being a good doctor requires more than sound medical knowledge and first-rate clinical skills. Numerous attributes are necessary to providing comprehensive care, including in particular the ability to communicate effectively with patients. A doctor is expected behave in a professional manner and simultaneously care in a humane way, giving due consideration to the cultural and spiritual background of patients’ lives. Moreover, in the Maltese perspective, patient advocacy and comprehensive social/medical education are also required of local physicians. It is becoming apparent that effective clinical teaching through example and proper instruction may go a long way to ingrain the above attributes into today’s medical students.

More than 150 years ago medical students were expected to have an all-England examination paper to determine knowledge. The final examination paper at the end of the 2nd year in the study of medicine was the most important examination paper.
MSK 9

Intervertebral disc height in premenopausal women, treated and untreated postmenopausal women and postmenopausal women with osteoporotic vertebral fractures

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Aims: Objective: To assess Intervertebral Disc Height in premenopausal women, hormone treated and untreated postmenopausal and postmenopausal women with radiographically confirmed vertebral fractures

Methods: Seven hundred and fourteen women were collected randomly from a large directory in a data base of a bone density unit. Every fifth woman in the directory was recruited from the DEXA directory. The image of the vertebral spine on the computer screen was sought for the women recruited. The adjustment mode was then employed allowing the horizontal cursors to be placed at the edges of the vertebral discs between the tenth thoracic vertebra.

Results: 714 Women were divided in five groups according to the menopausal/menstrual status. One hundred and eighteen (118) menopausal women were on HRT, 220 women were untreated menopausal women, 98 menopausal women were on bisphosphonates, 161 women were on calcium supplements, 79 women were premenopausal and 38 women had confirmed vertebral fractures. Age and weight differences were noted across groups and statistical. The vertebral fracture group was noted to have the lowest disc height (1.38 +/- 0.617; SD 0.1cm) of the 3 discs D1 - D3. The D1 - D3 disc height in the HRT and premenopausal groups were similar (1.92 +/- 0.617; 0.35 cm) and (1.92 +/- 0.617; 0.3cm) respectively. The disc heights in the other three groups (calcium 1.49 +/- 0.617; 0.48, untreated menopausal group 1.49 +/- 0.617; 0.48cm, Bisphosphonates 1.41 +/- 0.617; 0.47cm) were significantly lower than the oestrogen replete groups but were significantly higher than the osteoporotic vertebral fractures group (p < 0.001).

Conclusions: Postmenopausal women with vertebral fractures have significantly low disc heights. The disc heights are significantly lower than HRT treated and premenopausal women. The disc heights of the calcium and bisphosphonate groups were also significantly lower than the HRT treated and premenopausal women. These results suggests that the discoid shape and viscoelastic properties of the intervertebral discs may be relevant to the genesis of osteoporotic vertebral fractures and nonhormonally treated menopausal women also have significantly low disc heights.
Trochanteric cortical thickness in various groups of women – a new marker for postmenopausal osteoporotic hip fracture - a chain is as strong as its weakest link.

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Aims: The assessment of the greater trochanter cortical thickness in various groups of women.

Methods: One hundred and sixty-two women were recruited sequentially to have the outer cortical thickness of the left lower limb’s greater trochanter measured ultrasonically. Sixty-two women were young menstrual (under the age of 35 years) while there were 25 women in the older menstrual group (35+ years). The other groups were perimenopausal women (17) and treated (30) and untreated postmenopausal women (28). The woman would be placed on the right flank with both lower limbs extended. The greater trochanter would then be palpated and a 3.5 MHz ultrasound sector probe Aloka (SD 500) would be placed at right angles to the point where the trochanter could be felt. Under the sonolucent subcutaneous tissue, a "/" shaped hyperechoic signal could be seen representing the greater trochanter and is consistently noted to be thinnest point of outer cortical bone in this region. The inner and outer hyperechoic edges at the obtuse angle of the trochanteric "/" could be consistently delineated allowing the accurate measurement of the cortical thickness.

Results: The lowest cortical thicknesses were registered for the untreated menopausal group (0.776 +/- 0.2 cm) and the perimenopausal group (0.878 +/- 0.15 cm). The oestrogen replete group were consistently higher – young and old menstrual group (0.943 +/- 0.19 cm and 0.928 +/- 0.16 cm) respectively and 0.936 +/- 0.18 cm in the hormone treated group. The trochanteric thickness of menopausal group was significantly lower than all the other groups of women.

Conclusions: The low cortical thicknesses of the greater trochanter may represent a weak point where postmenopausal fracture of the hip may initiate. This area may be most vulnerable as it experiences significant shearing forces from all directions. Moreover possibly with less mobility related to the ageing process, osteoporosis may set in at a faster rate in this region due to the diminished strain applied through the ligamental insertions. Measurement of this region is easily performed and reproducible. This may be another marker for women at risk of the classical postmenopausal osteoporotic fracture of the hip.
MSK 29

Dying to Give Birth

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Aims: Systemic Lupus Erythematosus (SLE) is a multisystem autoimmune disease occurring predominantly in women of childbearing age. It is characterised by autoantibody production and a dysfunctional immune system resulting in organ damage. The risk of complications and adverse foetal outcomes in pregnant women with SLE is high. Pregnancy can cause major flares making treatment difficult.

Results: Case report: We report a case of a 27 year old primigravida with SLE. Up to time of conception she was still having occasional flare-ups characterised by rashes and arthritis. At 32 weeks gestation she presented with pre-eclampsia (BP 120/85, oedema, proteinuria). Anticardiolipin antibodies were negative but acute phase markers were found to be grossly elevated (ESR 92mm/hr, CRP 93mg/l). IV methylprednisolone was given to control the SLE. Two days later she developed breathlessness, fever and tachycardia and echocardiography showed a pericardial effusion. A further steroid pulse was given. The following day she developed persistent epistaxis. Acute phase markers remained raised, platelets dropped from 159 to 64 and haemoglobin dropped to 7g/dL. FDPs were positive consistent with DIC. A decision was made to deliver the baby by emergency Caesarean section as mother was deteriorating acutely and a healthy preterm baby was delivered. Post-partum, she developed severe pulmonary oedema as a result of fluid overload and hypertension and was transferred to intensive care. Despite diuretics, severe fluid restriction and signs of clinical dehydration, the CVP failed to drop below 20mmHg, raising the possibility of lupus pneumonitis. Echocardiography revealed a pericardial effusion with multiple valvular dysfunction and evidence
of LVH. Gradually her condition improved over the course of a few
days and she was eventually switched to oral steroids. She was on
five different antihypertensives (methyldopa, two β-blockers, an
ACE inhibitor and a calcium channel blocker) in an attempt to
control her hypertension. Over several days, medication was weaned
off and she remains stable.

**Conclusions:**
1. Pre-eclampsia can mimic SLE with both presenting as
   oedema, thrombocytopenia, anaemia, hypertension and
   proteinuria.
2. Majority of women do well if SLE is well controlled before
   conception.
3. Most pregnancies result in a preterm baby.
4. Multidisciplinary management is crucial for a successful
   outcome.
The patient underwent a lower segment caesarean section at 36 weeks gestation. A 2.37kg baby was delivered with an apgar score of 6 (at 1 minute) and 9 (at 5 minutes). The baby was admitted at NPICU and subsequently discharged after five days. The patient recovered well. Serum amylase decreased and she was discharged after seven days, with follow-up appointments with the obstetrician, gastroenterologist and the surgeon.

**Conclusions:** It is important to note that pregnancy-associated acute pancreatitis poses a survival threat to the patient and the fetus and a multidisciplinary approach is of outmost importance.
Pregnancy in classic fontan and total cavopulmonary connection - two cases compared

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Aims: Case report: Introduction: Fontan-type surgery refers to a number of palliative interventions which are resorted to in patients with congenital heart disease where biventricular repair is not possible.

Patients with this kind of anatomy are prone to long-term complications, several of which become more important during pregnancy. This reports the first two pregnancies in patients with palliated, univentricular hearts, one with total cavopulmonary connection (TCPC) and another with atriopulmonary connection, comparing and contrasting their complications.

Results: Case description: Patient 1, 27 years old and unmarried, presented to GUCH clinic when 14 weeks pregnant. She had undergone TCPC with intraatrial tunnel for double outlet right ventricle in London, UK at age 8 years. She had been leading a normal life since and her only medication was aspirin 75mg daily. Regular echocardiograms throughout pregnancy detected progressive dilatation of the inferior vena cava. Her pregnancy was uneventful other than for slight vaginal bleeding at 6 weeks and foetal growth plotted above the norm. Patient 2 was 28 years old at the time of her planned pregnancy. She had an atriopulmonary connection for tricuspid atresia in Sydney, Australia at age 8 years. She developed atrial flutter aged 10 years and was on long-term warfarin. This was changed to aspirin when she expressed the wish to get pregnant but had to be changed to subcutaneous low-molecular weight heparin in view of recurrence of atrial flutter early in pregnancy. There was trivial mitral regurgitation on prepartum echocardiography which worsened significantly during pregnancy leading to increasing left ventricular dimensions and features of mild heart failure needing diuretic treatment. Serial ultrasounds showed the foetus to be small for gestational age. Elective Caesarean section under epidural anaesthesia was opted for in both instances.

Conclusions: Discussion and conclusion: There are increasing reports of pregnancies in women with Fontan-type operations but the various modifications are usually not separated clearly. These 2 cases suggest that pregnancy is less well tolerated in women who have undergone older-style palliation and can be associated with smaller babies. Close liaison with obstetricians is of utmost importance to ensure a successful outcome in such pregnancies.
ONC 6

Vaginal leiomyosarcoma in the episiotomy site

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Aims: This is a case report regarding a very rare tumour (leiomyosarcoma) emanating from the scarred tissue of an episiotomy site.

Methods: A 53 year old lady presented to the Gynaecological Outpatient’s Department complaining of superficial dyspareunia over a period of six months. On examination a hard 3 cm non-tender lump was felt in the scarred episiotomy site. In view of the patient’s symptoms an excision biopsy was decided upon. The patient was counselled that due to the proximity of the vaginal lump to the rectum that there was the remote possibility that rectal injury may occur. An excision biopsy was performed under general anaesthesia removing most of the lump. Due to the proximity to the anal canal some tissue was left in situ. The histology of the excision biopsy revealed spindle cells appertaining to leiomyosarcoma with 10 mitotic figures per high powered field.

Results: In view of the histology and the site of the tumour, a total abdominal hysterectomy, bilateral salpingo-ophorectomy, posterior colpotomy and posterior exenteration with colostomy were performed by a combined surgical and gynaecological team. The post-operative period was uneventful. Histological examination indicated that the tumour was completely excised with the surgical margins free from any tumour. The patient is currently being followed up by the oncological and gynaecological departments.

Conclusions: In the Anglo-Saxon literature there are only 47 cases of vaginal leiomyosarcomas reported and this is the first case report of a leiomyosarcoma occurring in the episiotomy site.
A case of primary hyperparathyroidism in pregnancy
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Aims: A case of hyperparathyroidism in pregnancy is described.

Methods: A twenty-eight year old secunda gravida booked her pregnancy at 14 weeks gestation. It was noted in the past obstetric history that the woman had lost her first child at 41 weeks gestation delivering a stillborn baby weighing 4.2kg. In the second pregnancy an oral glucose tolerance test at 28 weeks gestation was normal.

Results: At 33 weeks gestation mild polyhydramnios was noted and the patient was admitted. During her hospitalization the patient complained of having passed a small renal stone. Two serum calcium levels were found to be significantly elevated 3.4mmol/l and 3.6 mmol/l. Serum parathormone was found to be significantly elevated - 247 pg/ml (Normal levels 12.0 - 72.0 pg/ml) and an ultrasound scan of the neck confirmed the presence of a parathyroid adenoma. Contemporaneously a mild rise in blood pressure and two ++ proteinuria were noted. Dexamethasone was administered with the two fold aim of pre-empting fatal respiratory distress syndrome in the case of premature delivery and possibly attenuating the possible increased risk for pre-eclampsia this condition carries. Steroids may have been also useful in treating hypercalcaemia. A parathyroidectomy was performed and the postoperative period was uneventful. The rest of the pregnancy was uneventful and at 38 weeks gestation a healthy child was delivered vaginally.

Conclusions: In view of this woman’s past history and the events occurring during the second pregnancy it may be useful to consider obtaining serum levels of calcium in cases of idiopathic stillbirth.
Prevalence of HPV among Maltese women with abnormal smear tests
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Aims: The association between cervical cancer and HPV has been known since the 1970's. However very little is known about the prevalence and the different types of HPV amongst Maltese women. This study aims to correlate abnormal cervical cytology with HPV typing.

Methods: This is a multi centre study. In Malta the aim is to recruit 100 women and since the study started in March 2008, over 78 women have been included. The population used are women over 18 able to give written informed consent who are referred to have a colposcopy at Mater Dei for an abnormal cervical smear. During the colposcopy session, a cervicovaginal lavage is collected using the Pantarhei® Screener. This is sent to the VU University Medical Centre in the Netherlands where HPV testing and genotyping are carried out.

Results: To date, about 78 samples have been analysed. Of these, about 3 samples were inadequate and the HPV types could not be determined. Of the remaining 75, 32 (42.7%) resulted negative for HPV, 11 (14.7%) were positive for Low Risk HPV types, 19 (25.3%) were positive for High Risk HPV, 7 (9.3%) were positive for a mixture of viruses while the remaining 6 (8%) results are still pending. The prevalence of the different HPV types among Maltese women was also looked into and this was correlated with the cytological abnormality.

Conclusions: From the data collected so far, the prevalence of HPV in Maltese women with abnormal smears is 49.3%. There was a strong association between HPV infection and cytological abnormality. Of note is that, in our study we found no HPV 18 and the most common HR HPV types are HPV 16, 31, 33, 68 and 66; and multiple infections were most commonly found below 35 years of age. HPV 16 was found in all lesions of CIN 3 and squamous cell carcinomas. This correlates well with studies carried out in
other countries notably the ongoing ARTISTIC trial in the United Kingdom. HPV testing and typing may allow us to be in a better position to advice our patients regarding follow up, treatment and also vaccination against HPV.

**OBG 2**

**Predictors for post-caesarean section pain and analgesic requirement**

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**Aims:** To assess whether pre-operative perception of experimental pain in women prior to elective caesarean section can predict the level of post-caesarean section pain and/or analgesic consumption. To compare puerperal pain scores in women having in-situ repair of the uterus at caesarean section versus scores of women having repair after exteriorizing the uterus.

**Methods:** Twenty women who were scheduled for elective caesarean section were enrolled in the study. On the eve of the caesarean, three devices were used to assess the patient’s pain threshold and tolerance. These included Pain Matcher? (Cefar Medical AB, Lund, Sweden) for electrical pain assessment, and two algometers (Wagner Instruments, Greenwich), one of which was digital, for pressure pain assessment. The instruments were applied to the patient’s right-hand, and the patient was asked to notify the investigator when she started to feel pain (pain threshold) and when she could no longer stand the pain (pain tolerance). Following surgery, the women reported the level of pain on a numerical rating scale (NRS), at regular time intervals, for the first forty-eight hours. The type of anaesthesia, site of uterine repair, haemoglobin levels, incidence of ileus, problems with breastfeeding, and analgesic consumption, focusing primarily on pethidine, diclofenac and paracetamol, were recorded. The pre-operative pain threshold and tolerance were compared with the post-operative NRS pain scores and analgesic consumption. The data was analysed using parametric tests.

**Results:** The mean pain scores at 6, 12, 24, and 48 hours post-operatively were 5.7, 5.9, 4.85, and 3.65 respectively. The Pearson correlation test revealed no significant relation between pre-operative pain threshold and tolerance and the post-operative NRS pain scores. A significant relation was found between pre-operative pain tolerance given by Pain Matcher? and post-operative paracetamol consumption (P=0.003). Multiple regression analysis showed that the site of uterine repair and the type of anaesthesia were the most valid predictors of post-operative pain.

**Conclusions:** Paracetamol consumption post-caesarean section can be predicted using Pain Matcher?, a portable device that generates a painful stimulus by increasing electrical pulses from a unit placed between the patient’s fingertips. Preliminary findings indicate a correlation between type of surgery and anesthesia used, with post-operative pain.

**OBG 3**

**Teenage pregnancy analysis**

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**Aims:** To identify epidemiological trends in teenage pregnancies and identify the antenatal and post-natal complications associated with childbearing in this young age group.

**Methods:** Analysis of National Obstetric Information System (NOIS) gathered by the Public Health Information and Research Division of mothers under 20 years who delivered in 2006.

**Results:** The 237 teenage pregnancies in 2006 accounted for 7% of pregnancies in that year. This showed an increase of 2% from 2005. Of these approximately 5.4% were cigarettes smokers, which is double the percentage of mothers who smoked during pregnancy in the general population. Of the 164 cases studied, 1 had ante partum haemorrhage, 9 had Gestational Hypertension. Approximately 17% of the mothers studied had an emergency CS during labour, 11% had an elective CS, 5% had a Ventouse delivery/forceps delivery and 67% had a normal vertex birth and 10 of the infants delivered needed NICU care. Further data analysis is being carried out.

**Conclusions:** Teenage pregnancies concern policy making in several countries for a number of reasons. Pregnancies in the younger age groups have been associated with higher rates of preterm delivery and perinatal mortality. These higher risks have been associated with many factors. Furthermore, research has proven that the prevalence of pregnancies in this age-group is on the rise in Malta, in comparison to many other EU countries where it is on the decrease.

**OBG 4**

**Is pre-eclampsia the end-stage of a systemic inflammatory response to various inflammatory triggers in the presence of a placental circulation? A new hypothesis on pre-eclampsia – the disease of theories**

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**Aims:** Pre-eclampsia remains the disease of theories. The enigmatic key to this disease is its causation. A possible all encompassing hypothesis is that pre-eclampsia is the end stage of an inflammatory cascade triggered by a systemic inflammatory cause in the presence of a placental circulation. A multitude of causes of systemic inflammation include infection, auto-immune disease, allergies, diabetes and collagen disease.

**Methods:** A case report is described whereby a 16 year old pregnant women who complained of a urinary tract in the second trimester (24 weeks gestation) went on to develop severe pre-eclampsia necessitating abdominal delivery. This patient complained of dysuria and pain in the right renal angle with a positive right renal punch. Urinanalysis revealed one plus protein and nitrates. Intravenous amoxicillin and clavulanic acid were initiated and the next day the patient developed pyrexia 101 F. After initiating antibiotics and intravenous fluids there was apparent resolution of urinary symptoms. The following day the patient developed Adult Respiratory Syndrome and was transferred to ITU. Oxygen saturations had to be maintained by applying positive pressure ventilation via face mask. The latter patient was found to
have a positive blood culture for proteus mirabilis and meropenem and gentamicin were initiated. Dexamethasone was given in view of the possibility of premature delivery.

**Results:** On day 4 following the initial signs of ARDS, grade IV preeclampsia BP 220/120 mmHg, proteinuria ++++, hypreflexia, 3 tap clonus and pulmonary oedema ensued which necessitated abdominal delivery. Post-hysterotomy, amloidipine, frusemide and magnesium sulphate had to be continued for five days until total resolution of the preeclampsia. The premature foetus needed prolonged special care and up to the time of writing this abstract the baby was still in the NICU. The mother was discharged from hospital seven days post operation.

**Conclusions:** Infection may be one source of inflammation which may trigger the inflammatory cascade terminating into preeclampsia. In the presence of a placental circulation, systemic inflammation may culminate into full blown pre-eclampsia. This may be due to endothelial damage sustained at the trophoblastic level releasing inflammatory mediators initiating an inflammatory cascade, the end stage of which is pre-eclampsia syndrome.

**OBG 5**

*Reducing the incidence of brachial plexus injuries in obstetric practice – A 30-year review 1980-2009*

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**Aims:** The incidence and variables associated with shoulder dystocia linked with brachial plexus injuries in Malta is reviewed over a period of 30 years.

**Methods:** Over a ten year period 1980-1990, the incidence of brachial plexus injuries following obstetric trauma was 2.9/1000 live births in the Maltese Islands. A review of traumatic shoulder dystocia over this period of time highlighted a number of risk factors with a background macroscopic population (11.0% > 4.0kg, 1.5% >4.5kg). The body mass index of the mothers of these babies was high (short and obese) and a high incidence of abnormal glucose metabolism of 12% was noted in this group of women. Abnormal labour patterns with prolongation of all the phases of labour were noted. Thirty one percent of traumatic shoulder dystocia followed instrumental deliveries.

**Results:** During the latter nineteen years the incidence of traumatic shoulder dystocia has dropped significantly to 1.0/1000 live births. This may be due increased attention towards the above mentioned antenatal and intrapartum factors. During the antepartum period increased awareness and care towards dietary control was undertaken in overweight women. Widespread screening was implemented for diabetes in pregnancy combined with meticulous glucose control of pregnant diabetic women. A joint antenatal clinic involving the care of a diabetologist and an obstetrician was initiated in 1996. More attention to abnormal labour patterns especially in the presence of macrosomic infants may have avoided difficult vaginal deliveries leading to traumatic shoulder dystocia. A shoulder dystocia drill has been included in the labour ward protocol. Increasingly breech presentations are being delivered by Caesarean Section. Caesarean Section is not without foetal complications as regards brachial plexus injuries. During the whole 30 year period there were four cases of brachial plexus palsy following abdominal delivery of macrosomic babies.

**Conclusions:** The incidence of traumatic shoulder dystocia has shown a sustained decrease over the past nineteen years with greater attention to both antenatal and intrapartum care.

**OBG 6**

*Recurrucdence of human papilloma virus cervical/vulval warts – blame it on sex or semen or both?*

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**Aims:** A case report is presented whereby a 16 year lady had resolution and recrudescence of vulval and cervical warts correlating with sexual activity.

**Methods:** A 16 year woman was referred by her general practitioner regarding vulval and cervical warts. On examination a moderate amount of warts could be seen on the vulval region however on vaginal examination a thick tuft of frond-like warts could be seen emanating from the cervix completely obstructing the view to the cervix. A ‘smear test’ was taken and a swab for Human Papilloma Virus subtyping was carried out. An appointment was given in one month’s time for colposcopy. The smear test revealed severe dyskaryosis and the HPV subtyping showed viral infection with HPV 6 and HPV 16. Swab and serological tests for sexually transmitted disease such as HIV, Hepatitis B and C, gonorrhoea and chlamydia proved negative. The woman was counselled accordingly, instructing her on the mode of HPV transmission and the implications of HPV 16 cervical infection.

**Results:** The woman stated that she totally abstained from sexual intercourse and was reviewed by colposcopy two months after the first visit. The vulval warts had decreased in amount and silver nitrate was applied to the remaining vulval warts. However the thick tuft of cervical frond-like warts were noted to have all but disappeared. Colposcopically directed biopsies showed florid koilocytosis compatible with HPV infection but no dysplasia was detected. The patient was reviewed four months after the first visit and the same findings were noted. At the six month visit the patient again noted a recrudescence of vulval warts. Speculum examination again revealed cervical warts however to a much smaller degree than the first examination. On further questioning the patient stated that she had commenced a sexual relationship with a different partner. A repeat smear revealed koilocytosis but no dyskaryosis. A repeat colposcopy is to be repeated in three months time.

**Conclusions:** This case poses a number of questions:
1. Could the total abstention from sexual intercourse be responsible for the apparent resolution of both vulval and cervical warts; or
2. Could the immunosuppressive properties of semen from a different partner possibly coupled with sexual physical abrasion be responsible for the recrudescence of genital warts?
**OBG 8**

**Dietary intolerance and endometriosis: a connection shedding light on the pathogenesis of an enigmatic disease**

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**Aims:** To evaluate a possible connection between endometriosis and dietary intolerance.

**Method:** This was a retrospective, comparative study conducted on 54 patients who had had laparoscopies for various gynaecological complaints. These women were recruited sequentially into the study so as to avoid bias (age range 20 – 55 years). The patients recruited were divided into two groups. Twenty-two patients were diagnosed to have endometriosis while the other 32 did not have this pathology. Post laparoscopy, these patients were asked through a telephone questionnaire regarding associated dietary intolerance.

**Results:** Twenty-two women were diagnosed as having pelvic endometriosis. The other thirty-two patients were noted to suffer from pathology other than endometriosis. More women with endometriosis complained of intolerance to one or more dietary components (26% versus 14%, p < 0.001). The dietary components cited most commonly to cause gastrointestinal intolerance in the group with endometriosis versus the group without endometriosis were wheat (36% vs. 22% p < 0.01) and dairy products (39% vs. 9.8% p < 0.0001).

**Conclusions:** Patients suffering from endometriosis complain of significantly more dietary intolerance. Dietary intolerance may alter the peritoneal immunological milieu influencing endometriotic colonization following retrograde menstrual flow. Diminished peritoneal immunological surveillance may encourage the implantation of endometriotic islets and once a foothold has been gained then the process may continue in the presence of altered peritoneal immunology. These findings may shed a new outlook on the pathogenesis and the management of endometriosis.
OBG 10
Demographic data, past medical and gynaecological history and drug history of women undergoing vaginal surgery for pelvic floor prolapse
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Aims: To perform an assessment of demographic characteristics, medical and drug history of a group of women undergoing pelvic surgery for pelvic floor prolapse.

Methods: 32 patients who underwent pelvic surgery over the past 4 years were contacted by telephone. Besides demographic data, the past obstetric and gynaecological histories were enquired about. The past medical history and the associated drug history were also recorded. Enquiry about bowel habit and a number of urological symptoms was also registered.

Results: Of the 32 patients, 28 were contacted of whom 4 had undergone pelvic floor repair and 24 vaginal hysterectomies. Patient ages ranged from 42 to 76 at the time of operation. Twenty of the 28 patients (71.43%) had a significant obstetric history, 9 (32%) women had having delivered more than twice through the vaginal route; 2 women had caesarean sections carried out. Ten (36%) women were hypertensive on medical treatment including diuretics. Four patients (14.28%) had inguinal/umbilical hernias, whilst 6 (21.43%) were habitually constipated. A past history of pelvic surgery (Pelvic floor repair n=2, hysterectomy n=1, colposuspension n=1), Insulin dependant diabetes (n=1), and diuretic use (n= 3) was elicited from the 8 patients complaining of urinary symptoms post-operatively.

Conclusions: A substantial proportion of women undergoing vaginal surgery for pelvic floor prolapse have significant findings in their past medical/surgical history and drug history. These findings may have a significant impact on the final outcome of the vaginal surgery and may be responsible for the post-operative symptoms. In view of these findings it is relevant to counsel patients appropriately prior to vaginal surgery.

OBG 11
Gastro-intestinal symptoms in women diagnosed with pelvic endometriosis
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Aims: To evaluate the occurrence of gastrointestinal symptoms in women with endometriosis.

Method: Fifty-four women who had undergone laparoscopies for various gynaecological complaints were recruited sequentially into the study so as to avoid bias (age range 20 – 55 years). Twenty-two patients were diagnosed to have endometriosis while the other 32 did not have this pathology. Through a telephone conducted interview a questionnaire was filled in regarding associated gastrointestinal symptoms.

Results: Gastro-intestinal symptoms were significantly more common in the endometriosis group 53% as compared to the other group of women 31% (p < 0.0001). When comparing the group of women with endometriosis versus the women without endometriosis the most common upper gastrointestinal symptom cited was heartburn (82% vs. 26% p < 0.0001) while the most common lower GIT symptom was constipation (78% vs. 41%, p < 0.001).

Conclusion: Patients suffering from endometriosis complain of significantly more gastrointestinal symptoms. The increased gastrointestinal symptomatology in patients with endometriosis may be due several factors. The psychological profile of patients with endometriosis may differ from other patients and this factor may influence gastrointestinal symptomatology. Food intolerance may influence peritoneal immunological surveillance which may influence both gastrointestinal symptomatology and the pathogenesis of endometriosis. These findings introduce a new perspective on the pathogenesis and possibly the management of endometriosis.

OBG 12
SANDS (MALTA) – Stillbirth and Neonatal society: the future
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Aims: SANDS (Malta) was first established in 1994 when a group of health professionals and bereaved parents felt that a vacuum existed where support of the bereaved parents of stillbirths and neonatal deaths was concerned. The inception of SANDS Malta has been instrumental in the creation of a full time Bereavement Midwife post with the Government Services.

Methods: It appeared convenient to organise the group’s activities according to the status of its members. Support from SANDS developed into an initial hospital and later a community based service. The primary aim in the initial stages is to provide comfort for the mother and partner. Respecting the parents’ wishes and providing an understanding and supportive environment are the key issues of support. Practical support is also offered so as to diminish the burden on both mother and her partner. For audit purposes a questionnaire distributed at the end of each SANDS session.

Results: The questionnaire indicated that the majority (69%) felt “much better” while the rest indicated that they felt “better” than before they attended SANDS. Following their attendance at SANDS the large majority (94%) were considering another pregnancy. In fact some 21 % of mothers did have a pregnancy within the first two years of attending SANDS. After 15 years, the services of SANDS Malta were further augmented by the employment of a full time Bereavement Midwife post with the Government Services. This led to one-to-one support in case of bereavement following miscarriage or stillbirth. The group support meetings with SANDS have undoubtedly decreased due to the services offered by the Bereavement Midwifery service allowing this organization to focus on ancillary aspects of bereavement support. The ancillary aspects involve the organization of two principal events in the year. During Easter time a Mass is organized by SANDS for bereaved parents as a tribute to their miscarriage or stillbirth. Later in the year during November, a communal burial for early and late miscarriages is organized by SANDS Malta. This acts as a formal closure of the traumatic episode for the parents concerned further aiding in their psychological healing.

Conclusions: SANDS has undoubtedly helped several parents to deal with the traumatic experience however difficult the circumstances. The effective support offered by SANDS very much depends on the efficient co-ordination of both the Hospital and Community components.
Autonomy and Informed Consent in Obstetrics and Gynaecology

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Aims: Improving patient care involves good explanation of any procedure that is being performed, so that informed consent can be given by the patient. As physicians, we have the obligation to disclose information to competent patients who can understand and authorize a treatment plan.

Methods: Patients undergoing obstetric or gynaecological interventions at Gozo General Hospital between 2005 and 2008 inclusive were seen pre-operatively by the Consultant Gynaecologist. The operation and its effects on the patient as well as the possible complications were explained. It is important to understand and accept that the doctor’s recommendations may not be accepted by the patient.

Results: Although predominantly Catholic, the hospital patients include other Christian denominations, Moslem patients, Jehovah Witnesses and patients with no specified religion. The views of each patient and her religious belief were respected at all times. Due consideration should be given in the care of pregnant women, as we are treating two patients in one body. With the new technology with which we can see the foetus so clearly, it is difficult not to look at the foetus as a patient.

Conclusions: Recognition of the need for provision of better information prior obtaining consent for operative treatment. Patients exercise their autonomy when agreeing to surgical procedures that are to be performed.

The changing face of the Maltese population

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Aims: The Central Mediterranean position of the Maltese Islands has ensured that the population has throughout the millennia maintained a degree of genetic influx. This has in more recent centuries been generally limited to a European influx. The study sets out to identify the recent immigration trends in as demonstrated by the registered births occurring in the Maltese Islands during 1999-2007.

Methods: All women delivering in the Maltese Islands during the period 1999-2007 were reviewed to identify their country of origin [maternities = 35825 with births = 36251].

Results: A total of 2158 [6.02%] women delivering in the Maltese Islands were identified as occurring in non-Maltese women; while a further 193 [0.54%] women did not have their country of origin registered. At least 63% of the latter can be definitely identified to be non-Maltese; however their country of origin was unknown or unidentifiable. Over half of these women [3.12%] came from the European [including Eurasia region] continent. The remainder came from the African [1.51%], the Asian [0.78%], the American [0.28%] and the Australian [0.26%] continents.

Conclusion: The last decade has seen the Maltese Islands being influenced by the general globalization process which has influenced immigration patterns. The effects of the present immigration patterns will therefore influence the future genetic and cultural composition of the Maltese population.
OBG 16

A retrospective analysis of patients with unexplained recurrent miscarriage attending a miscarriage clinic

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Aims: To determine the outcome of patients suffering from unexplained recurrent miscarriages following investigation and treatment as per protocol of the miscarriage clinic.

Methods: Patients referred to the miscarriage clinic are investigated applying a comprehensive protocol. An analysis of those patients with unexplained recurrent miscarriages following treatment as per protocol was carried out. The outcomes of these patients were recorded and analysed.

Results: Patients were divided into those with two and those with three miscarriages. The former group achieved a 78.6% live pregnancy rate following treatment while in the second group, this was only 54.5%.

Conclusions: Patients with two miscarriages were shown to have a much better prognosis than those with three. He recognised factors of age and miscarriage history were unaffected by the treatment protocols applied.


OBG 17

Body image and women’s life long health

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Aims: Introduction: Body image and body dissatisfaction has an impact on woman’s health and wellbeing throughout her life span, including adolescent, postnatal, premenopausal, and beyond menopause.

Methods: Patients attending Gynaecology clinic at Gozo General Hospital were interviewed and any body dissatisfaction problems were discussed. Weight concerns, self esteem, dieting were discussed in relation to menstrual problems and menopausal symptoms. Women attending for their post natal review visit reported their concern regarding the effect of breastfeeding and contraception on their body weight and body image.

Results: Body dissatisfaction and the wish to lose weight is reported in older women as well as in younger ones. Those women who had no history of adolescent problems were not immune midlife body image dissatisfaction. Women who had body image problems especially those with eating disorders as adolescents were noticed to be more prone to suffer from body dissatisfaction in midlife

Conclusions: Throughout a woman’s life span, body image plays an important role on her physical and mental wellbeing as well as her health.
and pethidine are given towards the end of the operation, to utilise their longer acting analgesic effect. In spinal anaesthesia, Marcaine is used as a spinal agent and pethidine and morphia are added for analgesia. Forty two had general anaesthesia and twenty nine had regional anaesthesia. With regards to abdominal hysterectomies, 60% were done under general anaesthetic whilst 40% were by spinal anaesthesia.

**Results:** The mean duration of stay was 3.5 days from the day of surgery to the day of discharge. Our results show that there was no significant difference between the effect of general and spinal anaesthesia, on the duration of hospital stay, for both vaginal and abdominal hysterectomy. Diclofenac and paracetamol suppositories are given routinely to every patient who has undergone a major gynaecological operation, unless there are contraindications. Intramuscular pethidine is added if needed. In the immediate postoperative period, the analgesia requirement was lower in the spinal anaesthesia compared to the general anaesthesia group.

**Conclusions:** Patients should be aware that their concern regarding regional anaesthesia is unfounded. Their hospital stay is not increased, and the need for analgesia is reduced.

**OBG 22**

**Dydrogesterone a possible preventative treatment for preterm delivery**

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**Aims:** Recent trials are ambivalent towards the usefulness of progesterone in preventing preterm labour in high risk patients. A possible alternative is dydrogesterone which is a progestin in oral form. Dydrogesterone is used in cases of miscarriage with significant success. The rationale of this study is that preterm labour is a continuum of pregnancy loss similar to miscarriage differing in that it occurs at a later stage. Dydrogesterone has also been implicated in reducing the incidence of pre-eclampsia a common cause of preterm delivery.

**Methods:** Patients were recruited from two firms which have a significant input from the miscarriage clinic and SANDS (Stillbirth and Neonatal Death Society). These were patients with recurrent miscarriage, threatened miscarriage, past history of miscarriages together with PCOS and infertility, neonatal death related to preterm labour or preterm delivery due to medical conditions such as pre-eclampsia. Also included were a number of women with multiple pregnancies. These women opted to continue dydrogesterone beyond 22 weeks until 34 weeks in an effort to avoid preterm delivery.

**Results:**

The high risk group parameters were compared to a group of contemporaneous women at low risk and the background population. Preterm delivery occurred in 6 out of 76 (7.9%) women at high risk of preterm delivery compared to 10 out of 140 (7.1%) in the low risk group. The occurrence of preterm delivery in the Maltese population is 6.8% similar to the low risk group.

**Conclusion:** Dydrogesterone given early in pregnancy appears to attenuate the incidence of preterm delivery in the high risk group assessed in this study. The above results may be due to the immunomodulatory properties exerted by dydrogesterone possibly preventing the initiation of the inflammatory cascade leading to preterm labour and pre-eclampsia another common cause for preterm delivery.
Prevalence of HPV among Maltese women with abnormal smear tests

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Aims: The association between cervical cancer and HPV has been known since the 1970’s. However very little is known about the prevalence and the different types of HPV amongst Maltese women. This study aims to correlate abnormal cervical cytology with HPV typing.

Methods: This is a multi centre study. In Malta the aim is to recruit 100 women and since the study started in March 2008, over 78 women have been included. The population used are women over 18 able to give written informed consent who are referred to have a colposcopy at Mater Dei for an abnormal cervical Smear. During the colposcopy session, a cervicovaginal lavage is collected using the Pantarhei® Screener. This is sent to the VU University Medical Centre in the Netherlands where HPV testing and genotyping are carried out.

Results: To date, about 78 samples have been analysed. Of these, about 3 samples were inadequate and the HPV types could not be determined. Of the remaining 75, 32 (42.7%) resulted negative for HPV, 11 (14.7%) were positive for Low Risk HPV types, 19 (25.3%) were positive for High Risk HPV, 7 (9.3%) were positive for a mixture of viruses while the remaining 6 (8%) results are still pending. The prevalence of the different HPV types among Maltese women was also looked into and this was correlated with the cytological abnormality.

Conclusions: From the data collected so far, the prevalence of HPV in Maltese women with abnormal smears is 49.3%. There was a strong association between HPV infection and cytological abnormality. Of note is that, in our study we found no HPV 18 and the most common HR HPV types are HPV 16, 31, 33, 68 and 66; and multiple infections were most commonly found below 35 years of age. HPV 16 was found in all lesions of CIN 3 and squamous cell carcinomas. This correlates well with studies carried out in other countries notably the ongoing ARTISTIC trial in the United Kingdom. HPV testing and typing may allow us to be in a better position to advice our patients regarding follow up, treatment and also vaccination against HPV.

“Sex and the City” in Catholic Malta

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Aims: The Maltese population traditionally harbours Roman Catholic beliefs that have been gradually secularised. The present study sets out to quantify the consequences of more liberal sexual attitudes in this community.

Methods: We reviewed the reproductive and sexual health indicators reported from Malta and from other selected European countries. We then analysed the findings of a questionnaire study which was carried out among 200 Maltese and 2200 other European individuals to investigate various aspects of their sexual history.

Results: A greater proportion of Maltese births occur in teenagers but the out-of-wedlock maternity rate in Malta appears to be the third lowest in Europe. However, the rate appears to have nearly trebled over seven years. Sexually transmitted infections rates in Maltese are either similar to or lower than those reported from the other European countries. The Maltese reported a higher mean age at first intercourse and a lower mean number of sexual partners mainly in women aged over 35 years. They received an earlier sexual education but they still predominantly resorted to unreliable contraception methods at their first sexual encounter.

Conclusions: The study confirms that sexual behaviour has changed. The educational support to deal with these altered practices is in place but still needs to be reinforced.