C-section

Poster Presentation

Antenatal booking visit and caesarean section rates

Y. Muscat Baron*, R. Camilleri, M. Gatt

Department of Obstetrics and Gynaecology, Mater Dei Hospital, Malta
E-mail address: yambaron@go.net.mt (Y.M. Baron).

The objective was to assess any difference in Caesarean Section Rates of an Obstetric Firm between two time periods following intervention at booking visit. During the period of May 2010 and April 2012 (Group 1) booking visits involved verbal counselling as to the management of pregnancy and delivery. From the 1/5/2012 the management of pregnancy and delivery was not only discussed verbally with the woman but the steps of the whole process were documented on the co-operation card and hospital notes. Spontaneous vaginal delivery was encouraged in all women where considered safe. In the majority of women a gestation of 41 + 3 weeks was advocated. Between May 2010 till April 2012, 681 were delivered under the Firm concerned while between May 2012 till May 2015, 686 women were delivered. The booking visit occurred significantly earlier in group 1 (15 weeks) when compared to group 2 (17 weeks). Induction rates rose from 24.6% (Group 1) to 28.2% (Group 2). The vaginal birth after Caesarean section increased nonsignificantly by 4.9%. The caesarean section rate decreased nonsignificantly from 28.8% to 27.4%. The emergency Caesarean section rate decreased nonsignificantly 17.62% to 14.72%. Nonsignificant trends in the reduction of Caesarean Sections and increased rates of vaginal birth after Caesarean section were noted when comparing both periods under study. Proper documented counselling at 17 weeks gestation gives timely direction to all the stakeholders involved including the parents.

http://dx.doi.org/10.1016/j.ejogrb.2016.07.220

C-section

Poster Presentation

Does the 10–15% caesarean section rate threshold established by the W.H.O. in 1985 still apply for modern obstetrics in developed countries?

Y. Muscat Baron

Department of Obstetrics and Gynaecology, Mater Dei Hospital, Malta
E-mail address: yambaron@go.net.mt.

In 1985 the W.H.O. (World Health Organization) stated "there is no justification for Caesarean Section Rates (CSR) in any region to be higher than 10–15%". This organization cited that the economic imperative was the most common driver for the rise in CSR in 69 developed countries which had CSR higher than 15%. Recent publications from the W.H.O. did state that "it is impossible from the studies undertaken to correct for increasing maternal age, obesity and the occurrence of medical conditions during pregnancy". Adolescent birth rate significantly reduces the CSR. Average maternal age having a live birth has consistently increased and in 2014 reached 31 years. 45% of the Maltese pregnant population have a B.M.I. (body mass index) of over kg/m^2. Gestation Diabetes rate has reached 16.4% and hypertensive disorders account for 6.7% of the pregnant population. From the data from the W.H.O. stillbirth rates (SBR) indicate a trimodal pattern correlating to CSR. (1) SBR of 2 – 4/1000 live births (LB), (2) SBR 4.1 – 12/100 LB and (3) SBR 12.1 – over 30/1000, the highest being 46.7/1000 in Pakistan. None of the countries with a SBR of 2 – 4/1000 have a SBR between the W.H.O recommended 10–15% CSR. Both caesarean section and induction of labour when indicated reduce the SBR especially in growth restricted babies which account for 50% of stillbirths. All relevant variables should be given due consideration when determining "ideal" Caesarean Section rates" especially in the context of the changing maternal demography and health characteristics in developed countries.

http://dx.doi.org/10.1016/j.ejogrb.2016.07.221

Infections in obstetrics and gynaecology

Poster Presentation

Reducing caesarean section surgical site infection with single-use negative pressure wound therapy in high-risk patients

David Myers

Director of Market Access, Smith & Nephew, Hull, UK
E-mail address: david.myers@smith-nephew.com.

Introduction: Caesarean Section (CS) is the most common major surgery performed on women in the UK and surgical site infection (SSI) following CS poses a significant health burden. A recent study, supported by the Health Protection Agency, considered post-operative complications following 4107 Caesarean deliveries across 14 hospitals in England and Wales [1]. The overall SSI rate was 9.6% while it increased to 19.3% in women with a BMI >35. This is of concern, considering the increasing rates of obesity (BMI >30), which have increased in the UK from 50.5% of women in 1993 to 60.4% in 2012 [2].

Methodology: There is an increasing body of evidence to suggest that NPWT can be effective in reducing the risk of post-operative wound complications including SSI [3]. This current work reports on the introduction of a new single-use negative pressure wound therapy (NPWT) system (PICO^{TM}, Smith & Nephew, Hull, UK) in to 4 hospitals in the UK and Ireland. PICO was used on all high-risk CS patients with BMI >35 and data were collected on overall infection rates and readmissions. Where possible, patients were followed-up post-discharge, either by community midwives or by telephone interviews with the patient. The data was consolidated on an electronic registry platform.

Results: By February 2016 a total of _ patients received PICO at the 4 participating sites. Median BMI was _ (range _ to _). Average length of stay prior to discharge was _ days. Where follow-up was possible, average time of follow-up was _ days post-discharge from hospital. Overall the reported incidence of SSI was _%, with a reported readmission rate of _%.

Conclusion: The data demonstrates that the use of a single-use, disposable NPWT device (PICO) in high-risk, high BMI CS patients can reduce the incidence of SSI compared to that reported in the Wloch HPA study (_% v 19.3%). With the cost of treatment of an individual SSI in CS being reported as £3716 [4], despite the implementation costs of PICO, the reduction in SSI rates offers potential major cost savings for the participating institutions.

References

[1] Wloch C, Wilson J, Lamagni T, Harrington P, Charlett A, Sheridan E. Risk factors for surgical site infection following caesarian section in England: results for a multicentre cohort study. BJOG 2012;119(11):1324–33.

[2] Health and Social Care Information Centre (HSCIC), http://www.hscic.gov.uk/catalogue/PUB13648 [accessed 01.16] Statistics on Obesity, Physical Activity and Diet: England. Report; 2014.
[3] Karlakki S, Brem M, Giannini S, Khanduja V, Stannard J, Martin R. Negative pressure wound therapy for management of the surgical incision in orthopaedic surgery. A review of evidence and mechanisms for an emerging indication. Bone Joint Res 2013;2:276–84.
[4] Jenks P, Laurent M, McQuarry S, Watkins R. Clinical and economic burden of surgical site infection (SSI) and predicted financial consequences of elimination of SSI from an English hospital. J Hosp Infect 2014.

http://dx.doi.org/10.1016/j.ejogrb.2016.07.222

Training and education

Poster Presentation

Students' perception of HybridLab™ distant training method of obstetrical emergencies in South Kazakhstan

Ruta Nadisauskiene*, Evelina Pukelnyte, Lina Bardauskiene, Birute Kumpaitiene, Bronislava Petrosienė, Paulius Dobozinskas

Lithuanian University of Health Sciences, Lithuania
E-mail address: ruta.nadisauskiene@gmail.com (R. Nadisauskiene).

Background: In the frame of longstanding collaboration project between Lithuanian University of Health Sciences, Crisis Research Centre and Health Board of South Kazakhstan Region distant multimedia laboratories, based on electronic/digital/algorithmic learning (HybridLab™), was established in three Perinatal Centre of South Kazakhstan. The purpose of the study was to evaluate the satisfaction of participants on HybridLab™ self-direct simulation training programme and the impact of the programme on self-evaluation of skills for successful acquiring of obstetrical emergencies (OE) protocols.

Materials and methods: A retrospective cohort study was performed. Remote HybridLab™ self-direct simulation training courses were held since May, 2015. The duration of course was 5 weeks. Participants were trained by HybridLab™ method on the 5 topics: (1) Postpartum haemorrhage (PH) risk assessment, (2) Active management of placental period and risk of haemorrhage, (3) Treatment of PH, (4) Pulmonary artery thromboembolism (PATE) risk assessment, (5) Diagnosis and treatment of PATE. HybridLab™ method consists of: (1) E-learning (participants preparation before Simulation class); (2) Training, practice and simulation in HybridLab™ (24/7) without instructor; in the real workplace with real team in comfortable time; with successful step-by-step solving of simulated situation using "DRAKON" type algorithms; (3) Virtual monitoring, evaluating and debriefing participants' performance by Lithuanian instructors in the real time. After each topic students filled the form of the topic evaluation. Self-evaluation skills and confidence gained were determined using Likert-scale 5 points questionnaire. Question of self-evaluation about their competency of assessment and management was "I am able to".

Results: Over the month 461 specialists of maternal and newborn health care team: physicians 23.8% (of them obstetricians and gynaecologists 69.1%), nurses 21.1%, and midwives 55.1%. After training course 91% of participants were declared the great benefit of 1 topic, 92% – of 2, 90% – of 3, 90% – of 4, 92% – of 5. The strong self-confidence in the management of 1 topic was in 86% of participants, of 2 – in 88%, of 3 – in 89%, of 4 – in 83%, of 5 – in 87%. 92% of all participants were satisfied with learning tests and 94% with algorithms. Conclusion. HybridLab™ distant training method is standardized, high quality training in OB. Participants are satisfied with HybridLab™ method and have strong self-confidence in the management of obstetrical emergencies. Further researches on the persistence of knowledges and skills are required.

http://dx.doi.org/10.1016/j.ejogrb.2016.07.223

Minimally invasive surgery

Oral Presentation

Use of direct optical entry technique as a safe modality for primary trocar insertion for gynaecological laparoscopic procedures

Priti Nagdeve*, Ausha De Silva, T.J.M. Mudzamiri

Dept of Gynaecology, Raigmore Hospital, Inverness, UK
E-mail address: virprit80@yahoo.co.in (P. Nagdeve).

Objectives: To evaluate the clinical efficacy and safety of direct optical entry as an entry technique for gynaecological laparoscopic surgery and its associated complications.

Methods: Retrospective review of patient notes to evaluate laparoscopic entry techniques at elective gynaecological procedures undertaken between October 2014 and October 2015, at Raigmore hospital, Inverness, UK. All elective cases undertaken by the two gynaecological surgeons with a special interest in laparoscopic surgery were reviewed.

Results: Direct optical entry technique was used in 130 cases. Cases with palmers point entry were also direct optical entry. A single pass entry was done in 107 cases. In 23 cases, the number of passes was not documented. There were no bowel, vascular, or visceral injuries at primary trocar entry during the study period. There was only 1 case of omental contusion which was thought to be harmless. This entry technique was also found safe in high risk surgical patients such as extremes of body mass index (BMI 16.5–45) and previous multiple open and/or laparoscopic abdominal surgery. There was neither failed entry nor extraperitoneal insufflation found during the study period. One patient returned to theatre but this was not related to an entry related complication. No cases were converted to laparotomy secondary to failed entry.

Discussion: To minimize entry-related injuries, many techniques, instruments, and approaches have been introduced over many years. The use of these methods of entry is based on surgeon's training, experience, bias, and according to regional and interdisciplinary variability. Direct optical entry uses a single-use visual hollow trocars in which a zero degree laparoscope is loaded for the distal crystal tip to transmit real-time monitor images while transecting abdominal wall tissue layers. The visual entry system represents an advantage over traditional trocars, as it allows a clear optical entry.

Conclusions: Our case series shows that the direct optical entry is a safe and effective alternative laparoscopic entry technique. We understand that the case numbers in this series is limited and a randomised controlled trial would be the best way to evaluate the benefits and risk of direct optical entry and other "more established" techniques of abdominal entry at laparoscopic surgery. The absence of major complications with the use of the optical trocar in our series is consistent with the exceptionally low rate of complications seen in other reports [1,2]. This technique has become our entry technique of choice for initiating the pneumoperitoneum as it is safe, simple and cost effective.