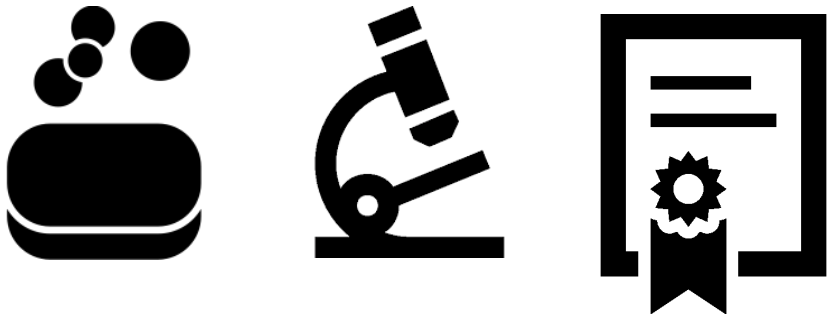
Information on SOAP internet lectures
Research project
Diploma criteria

Joanna Haynes



Information on SOAP internet lectures

Advanced Obstetric Anaesthesia Training Programme

Version 13.07.17

	teaching and training, research and audit, and management of an obstetric anaesthetic service. The Trainee will be a member of the on-call group covering general duties which includes on-call for the Delivery Suite
Appraisal & Assessment	Appraisals will be conducted by the Personal Educational Supervisor every fourth month. A formal assessment of the training will take place at the end of the attachment.
Journal Club	The trainees will be expected to participate in a journal club in the clinical department
Morbidity & Mortality Meetings	A programme of these meetings is to be organised by one of the Consultant Obstetric Anaesthetists and the Trainee will be expected to participate.
E-learning lectures	"Open Anesthesia Lecture Series for Fellows" to be found on www.soap.org 24 of the lectures available should be seen and reviewed.
Exchange Program	The training period includes an exchange programme with a clinic in a foreign country. The exchange period should be no less than 1 month. It can be divided into two periods.
Residential Courses	SSAI organizes four courses, each of 3-4 days duration. The responsibility for organising these courses will circulate between all the Scandinavian countries. Course 1: Introduction and basic skills. Course 2: Current practise of obstetric anaesthesia. Course 3: Obstetric emergencies and clinical decision making. Course 4: Leadership and implementation strategies.
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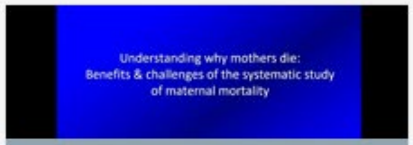
Information on SOAP internet lectures

	Trainee will be expected to participate.
E-learning lectures	"Open Anesthesia Lecture Series for Fellows" to be found on www.soap.org 24 of the lectures available should be seen and reviewed.
Exchange Program	The training period includes an exchange programme

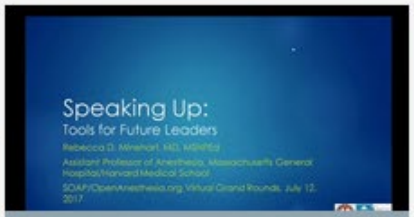
Information on SOAP internet lectures

Information on SOAP internet lectures

Each month, we will feature a lecture from an internationally recognized expert in Obstetric Anesthesia. The goal of this section is to provide fellows in Obstetric Anesthesia monthly access to expert content.



August 2017: Understanding Why Mothers Die: Benefits and Challenges of the Systemic Study of Maternal Mortality with Michael Richardson



July 2017: Speaking Up: Tools for Future Leaders with Rebecca Minehart

June 2017: Levels of Maternal Care with Jennifer Lucero

May 2017: Posttraumatic Stress Disorder and Birth: Clinical Considerations and Treatment Options with Terri deRoon-Cassini

April 2017: Diagnosis and Management of Shock States that can Complicate Pregnancy with Sheri Berg

March 2017: Post-Dural Puncture Headache and Epidural Blood Patch with Barbara M. Scavone

February 2017: Anesthesia for Non-Obstetric Surgery with Yaakov Beilin

January 2017 -- Uterine Rupture with Libby Ellinas

Information on SOAP internet lectures

”Open Anesthesia Lecture Series for Fellows” to be found on www.soap.org

24 of the lectures available should be seen and reviewed.

http://www.openanesthesia.org/virtual-grand-rounds-in-obstetric-anesthesia/

Each participant can choose lectures according to a personal interest

No	date	Title of lecture	Three keypoints of interest
1			
2			
3			
4			

Information on SOAP internet lectures

Post Dural Puncture Headache and Epidural Blood Patch

Barbara M Scavone

1) UDP in obstetrics 1.5%. Frequency of PDPH in those with UDP with large bore epidural needle is 50-60%. Percentage of those who need EBP is 58%. PDPH without dural puncture 0.2-0.3%.
2) Interpatient variability in occurrence of headache. Some patients with big CSF leak, have no headache while some with minimal leak do have. Low ICP causes traction of pain sensitive meningeal structures. Third mechanism is when ICP is low, there is the reflex intravascular venous dilatation and pain sensitive structures around the vessels affected (vascular headache like migrene). Migrene risk of headache.
3) Risk factor: young age, female gender, obstetric patients (young, women…? Body habitus- high BMI, more likely to have UDP, but less likely to get PDPH. EDP more effective (need for 1 BP, not more). Patients with vaginal delivery more likely to have headache compared to CS, probably related to pushing time. The longer the pushing time the more likely to get the headache (< 30 min especially).
4) Risk factors related to headache. The smaller the needle, the smaller the risk. The cutting needle higher risk.
5) Air vs. saline: no difference in the occurrence of the headache. However, when UDP occurs, the patients in the air group are more likely to get a headache (67%) compared to 10% in the saline group. Air related headaches faster onset and shorter duration. Many probably related to pneumocephalus. Anesthesiology; 1998, 88:76-81. However, Scott Segal and Katherine W Arendt in their retrospective effectiveness study showed no difference in PDPH if anaesthesiologist used the medium they were used to using. Limit amount of air if you are using air. With air maybe missed segments, but increased volumes of local anaesthetic seem to mitigate this.

Information on SOAP internet lectures

Obstructive sleep apnea in pregnancy, Jennifer Dominguez

1. 11% of women who deliver at Duke (NC) have BMI > 40.
2. Neuraxial anesthesia if possible for super-obese (IT-catheter).
3. OSA covaries with many obstetric complications - thus worth screening for.
4. Triggers: age, BMI, chronic HTN and witnessed apneas.
5. Encourage to bring CPAP to hospital.

Thrombosis in Pregnancy Outcomes, Shane Reeves

1. APS (one of the criteria): 3 or more consecutive losses < 10 wks
2. Associated with thrombophilia: Recurrent miscarriage, venous thromboembolism, growth restriction, preeclampsia.
3. Most asymptomatic women with no hx of adverse pregnancy outcome or VTE do great (despite genetic predisposition).

Opioid Use in Pregnancy and the Postpartum Period, Brian Bateman

1. 37.8% used a prescription opioid.
2. Single leading cause of death in individuals less than 50 years.
3. 14.4% of opioid exposure during pregnancy (21.6% in Medicaid).
4. Neonatal Abstinence Syndrome (NAS), birth defects, and placentally-mediated complications.
5. 1/300 persistent users after 1 year post cesarean.
6. Patient request was half of what prescribed.
7. 28.5% were prescribed an opioid after vaginal delivery.

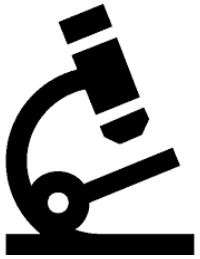
Neonatal Resuscitation, Dan Drzymalski

1. Apgar score (Virginia Apgar) publicated 1953.
2. SpO2 1 min (60 sec) 60%; 10 min 85-95%.
3. Pulseoxymeter on right arm (pre-ductal).
4. Many anesthesiologists are involved, but few trained -> therefore training programs even though not formally responsible.
5. The anesthesiologist (and surgical team in general) can not be primarily responsible for NRP.

Maternal Sepsis, Melissa Bauer

1. Ignaz Semmelweis 1818-1865 - colleague died after cut with knife and with similar autopsy findings as mothers.
2. Sepsis deaths to a high degree preventable.
3. Delays: recognition, escalation of care, appropriate antibiotics.
4. Some risk factors; but also common without risk factors.
5. Maternal physiology masks recognition - or coincides with definition of sepsis.
6. Maternal Early Warning Criteria/System - 75% of patients who died of maternal sepsis triggered MEWS at admittance.
7. Sepsis calculator can helt avoiding delay in escalation of care.
8. Each hour of delay of (appropriate) antibiotics: 7.6% increase in mortality.

Research project



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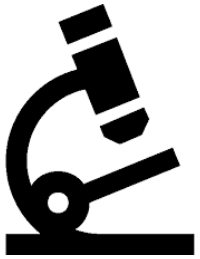
Research project



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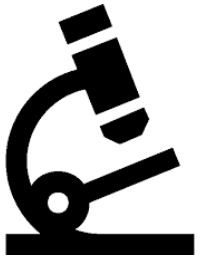
Research project



Research Project
Investigation, audit, case report or literature review

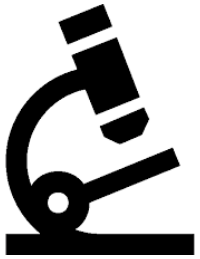
1	Title of Project:	
2	Source of any funding:	
4	Project supervisor:	
5	Date begun:	
6	Date completed:	
7	What question are you seeking to answer?	
8	What is the importance of this project?	
9	Describe your methodology:	
10	Describe your results:	

Advanced Obstetric Anaesthesia Training Programme

Version 29.01.19

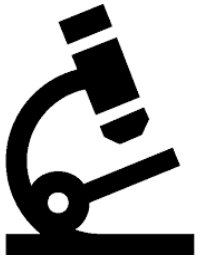
11	Presentation of this project	
12	Will you be making any personal presentation of these results?	
13	Evaluate the importance of your results:	
14	How much time have you personally spent on this project?	

Research project



- Group work is accepted
- Publication in Acta Anaesthesiologica Scandinavica is encouraged
- Investigational project
- An audit
- Case report with litterature review
- A litterature search and review of an important topic

Research project



- Publication; nice but not essential for the diploma. Your research project must, however, be written up in the form of a paper for publication.
- A presentation of your project must be given
- Poster and/or oral presentation at SSAI Congress

Research project

- Publication
  - Fuhrmann, Telnes, Ekelund….

AOGS
ACTA Obstetricia et Gynecologica Scandinavica

AOGS REVIEW ARTICLE

Hemostatic resuscitation in postpartum hemorrhage – a supplement to surgery

KIM EKELUND[1], GABRIELE HANKE[1], JAKOB STENSBALLE[2,3], ANNE WIKKELSØE[4], CHARLOTTE KREBS ALBRECHTSEN[1] & ARASH AFSHARI[1]

Transversus abdominis plane block vs. wound infiltration in Caesarean section: a randomised controlled trial

A. Telnes[1], E. Skogvoll[1,2] and H. Lonnée[1]

ORIGINAL ARTICLE

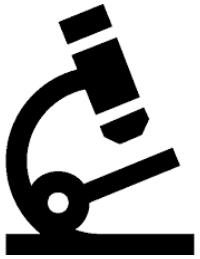
s University Hospital, Trondheim, Norway
gian University of Science and Technology (NTNU), Trondheim, Norway

Multidisciplinary team training reduces the decision-to-delivery interval for emergency Caesarean section

L. Fuhrmann[1], T. H. Pedersen[1], A. Atke[2], A. M. Møller[1] and D. Østergaard[3]

[1]Department of Anaesthesiology and Intensive Care, Herlev Hospital, Copenhagen, Denmark
[2]Department for Gynaecology and Obstetrics, Herlev Hospital, Copenhagen, Denmark
[3]Danish Institute for Medical Simulation, Herlev Hospital, Copenhagen, Denmark

Research project



Title:

Audit of obstetric post dural puncture headache in two similar-sized university teaching hospitals in Norway

Do NOT use All CAPS in Title

Abstract: (Your abstract must use Normal style and must fit into the box. Do not enter author details)

INTRODUCTION Post dural puncture headache (PDPH) is a well known complication following central neuraxial blockade and can be of especial importance in new mothers due to the frequency of neuraxial procedures performed in this patient group and often unacceptable symptoms making care of the newborn difficult.
OBJECTIVES Our primary aim was to audit the incidence of PDPH in our two institutions and compare our data to published international data. Secondarily we wished to evaluate the effectiveness of our existing treatment strategies and assess symptom progression over a six week period in order to provide accurate information to mothers delivering on our units. Finally we wished to identify any potential contributory factors in our patient groups.
METHODS Over an eight-month period any woman identified as having an accidental dural puncture and/or PDPH was prospectively included in our audit from the total population of women who received neuraxial analgesia or anaesthesia during delivery or the immediate post-partum period. A PDPH was defined according to duration and nature of symptoms in order to ensure like recruitment in both institutions. Data concerning the neuraxial procedure, delivery, symptoms and treatment were recorded in these cases. All women entered into the audit were contacted by telephone 2 and 6 weeks later to enquire about their symptoms at that time.
RESULTS Over the audit period 2712 neuraxial procedures were performed in our two institutions and resulted in 10 PDPHs, giving an incidence of 0.37%. Of these 10 PDPH, 4 were associated with a recognised accidental dural puncture. 8 of the 10 neuraxial procedures resulting in PDPH were performed by anaesthesia trainees. 9 out of 10 headaches developed within 24 hours. All were moderate or severe in intensity and associated with moderate or severe limitation in activity in 8 patients. 6 of the 10 patients were treated with a blood patch, with one requiring a second patch. All these 6 were symptom free at discharge from hospital, while those managed conservatively were not. All patients were symptom free at 2 and 6 weeks.
CONCLUSIONS PDPH rates at our institutions fall within published incidences. Women treated with a blood patch were symptom free earlier than those managed conservatively.

Research project

SYKEHUSET ØSTFOLD

Oslo University Hospital

Hyperthyroidism in patient with molar pregnancy.

Grethe B. Heitmann, MD$_1$, Magdalena R. Værnesbranden, MD$_1$, Aina Sophie Zsidek, MD $_2$, Leiv Arne Rosseland, Prof., MD$_2$, Charlotte Loennechen, MD$_2$.
1 Østfold Hospital, Norway, 2 Oslo University Hospital, Norway

Introduction:
Hyperthyroidism is a rare complication of molar pregnancies with the risk of surgery induced thyroid storm with potentially lethal outcome. Hyperthyroidism is caused by high levels of human chorionic gonadotropin (HCG).

Case report:
A 28 year old woman was referred to gynecological department at Østfold Hospital, due to symptoms of hyperemesis gravidarum (gestational age 12+2). She had no previous medical history, except for TSH <0.01, and FT4 >77, measured by the GP one week before admission, and daily attacks of irregular heart beats.

Physical examination was normal, HCG >225,000 IU/L, and vaginal ultrasound findings were consistent with molar pregnancy. She was transferred to the operating room (OR) for uterine suction,. In the OR she was tachycardic, (200 BPM, BP 149/87) and serious hyperthyroidism was finally acknowledged. The planned procedure was postponed to allow treatment with propranolol and propylthiouracil.

The US picture of the uterus

Her vital signs were observed and she was stabilized in the recovery unit. After 4 days of medical treatment she was transferred to Oslo University Hospital, due to increased risk of thyroid storm during surgery. At arrival at the University Hospital: BP 127/65, pulse 70 BPM, HCG 555,128, TSH <0.01 and FT4 >100. She underwent an uneventful evacuation of her molar pregnancy, anesthetized with TIVA.

Three days after surgery she was discharged home, FT4 decreased to 49.4 and HCG to 40,093. Histology revealed partial hydatidiform mole.

Mechanical obstruction due to an enlarged thyroid gland.	Intubation problems, obstruction of trachea.
Cardiovascular effect of catecholamin release.	Arrythmia, refractory hypertension leading to congestive heart failure with hypotension and shock or pulmonary edema.

Anesthesiologic challenges related to hyperthyroidism caused by molar pregnancy.

After 40 days: hCG 11, TSH 2. 73 and FT4 23

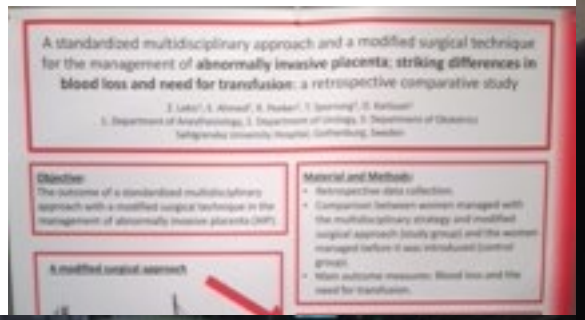
	Local hospital 10.02	University hospital 16.02	Post operative 17.02	18.02	Discharge 20.02	After 40 days	Normal range
TSH	< 0,01	< 0,01			0,04	2,73	0,5-3,6 pmol/L
FT4	> 77	> 100			49,4	23	9,0- 19,0 pmol/L
FT3	> 46	> 13,2			9,0		3,5- 6,5 pmol/L
HCG	>225 000	555 128	452 234	172 937	40 093	11	0 IU/L

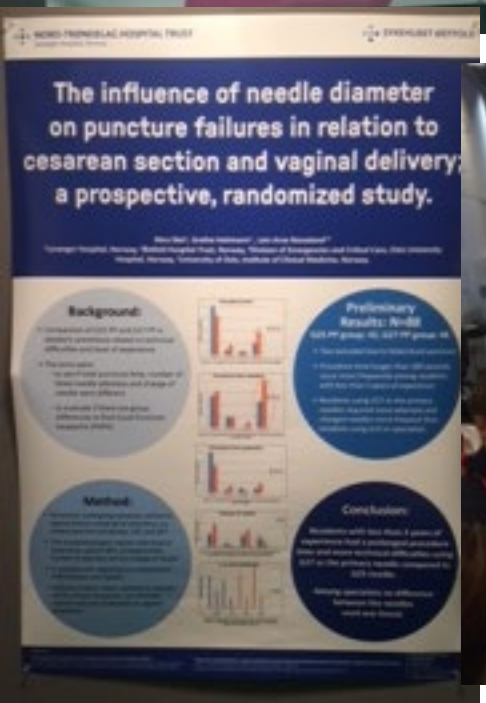
Conclusion:
Molar pregnancy can cause hyperthyroidism, and because of the possible risk of surgery induced thyroid storm, acknowledgement and preparations before procedures is essential.

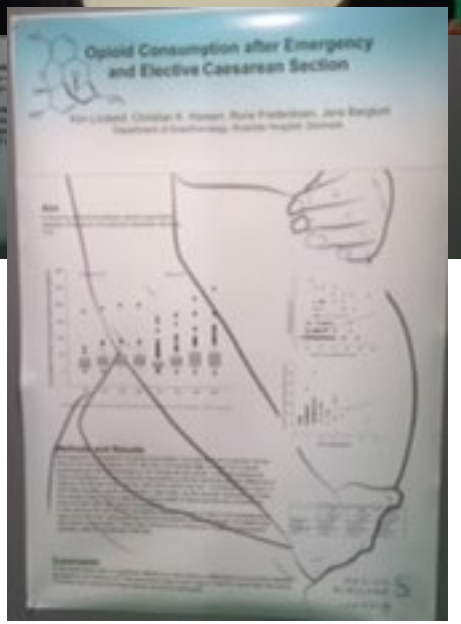
References:
1. Wellington, L., et al., *Hyperthyroidism and human chorionic gonadotrophin production in gestational trophoblastic disease.* Br J Cancer, 2011. **104**(11): p. 1665-9.
2. Burch, H.B. and L. Wartofsky, *Life-threatening thyrotoxicosis. Thyroid storm.* Endocrinol Metab Clin North Am, 1993. **22**(2): p. 263-77.
3. Samra, T., et al., *Peri-operative concerns in a patient with thyroid storm secondary to molar pregnancy.* Indian J Anaesth, 2015. **59**(11): p. 739-42.
4. Adali, E., et al., *The use of plasmapheresis for rapid hormonal control in severe hyperthyroidism caused by a partial molar pregnancy.* Arch Gynecol Obstet, 2010. **279**(4): p. 569-71.
5. Aseri, A., et al., *Hyperthyroidism in molar pregnancy: rapid preoperative preparation by plasmapheresis and complete improvement after evacuation.* Transfus Apher Sci, 2007. **36**(1): p. 87-9.
6. Celiktas, B., et al., *Postoperative repeated respiratory insufficiency and thyrotoxicosis in molar pregnancy.* Ir J Med Sci, 2012. **181**(2): p. 281-3.
7. Bhatia, N. and S.M. Mittherwal, *Hydatidiform mole with concomitant hyperthyroidism: An anaesthetic challenge.* J Anaesthesiol Clin Pharmacol, 2016. **32**(4): p. 537-538.
8. Solak, M. and G. Akturk, *Spinal anesthesia in a patient with hyperthyroidism due to hydatidiform mole.* Anesth Analg, 1993. **77**(4): p. 851-2.
9. Matsumoto, S., et al., *Anesthetic management of a patient with hyperthyroidism due to hydatidiform mole.* J Anesth, 2009. **23**(4): p. 594-6.

Research project

Malmø 2017







Certification

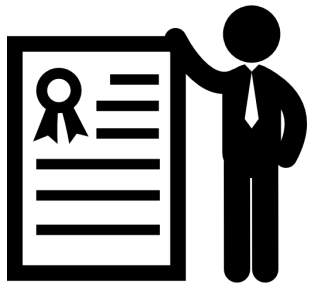
Certification

The programme committee will grant participants a diploma on Advanced Obstetric Anaesthesia on the following conditions:

- Completion of the two year clinical training programme including one month exchange programme
- 24 SOAP video lectures seen and reviewed, on current topics in obstetric anesthesia.
- Attendance of four residential courses and passing whatever test and task included in those
- Approval of portfolio including log book
- Approval of presentation and report of a Research Project
- An abstract presented at the SSAI congress 2021

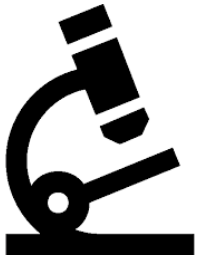
How to get your diploma

1. Mail the portifolio and other documents from the checklist to Elin:- elin.bjornestad@helse-bergen.no
2. Elin will check to see if anything is missing
3. She will forward the manuscript to two reviewers not from your own country
4. After the review process, Elin will forward the approved documents to Kim
5. Kim will issue your diploma



Research project

Checklist....



1. Completion of the two-year clinical training programme (incl 4 months at teaching hospital)
2. Completion of four weeks of exchange programme
3. 24 SOAP virtual grand round lectures viewed and summarised
4. Attendance at four residential courses and successfully completing tasks involved
5. Attendance at SSAI congress with presentation of Abstract/poster
6. Approval of portfolio including logbook
7. Peer-review approval of research manuscript