



Royal College of Obstetricians and Gynaecologists

Newsletter 13: April 08

Acute Fatty Liver of Pregnancy Final Study Result

Fifty-seven women were diagnosed with Acute Fatty Liver of Pregnancy (AFLP) between February 2005 and August 2006 in a cohort of over 1.1 million pregnant women, representing an estimated incidence of 5.0 cases per 100,000 maternities (95% confidence interval (CI) 3.8-6.5/100,000). This is the largest populationbased cohort of women with AFLP to date, and illustrates the benefits of national collaboration through UKOSS in the study of rare disorders. The existing literature consists predominantly of small hospital-based case series or historical cohorts identified retrospectively over a number of years. Incidence estimates from these studies are very imprecise and vary widely between 1 in 900 and 1 in 16,000 maternities due to the small size of the studies. Similarly, maternal case fatality estimates range between 12% and 18% and neonatal mortality estimates from 7-58%. The information available to counsel women has therefore been very limited.

Nearly 20% of the women with AFLP in the UKOSS study had twin pregnancies. We can estimate that this represents a fourteen times

increase in risk of AFLP in women with twin pregnancies. Women with AFLP were also more likely to be primiparous and older. We also noted that 20% of the cohort of women with AFLP were underweight (BMI of less than 20Kg/m²), suggesting a possible inverse relationship between BMI and AFLP.

Epidemiology Unit

Only one woman died, representing a case fatality of 2% (95% CI 0-9%), which is lower than reported estimates. The outcome we observed for the fetus was poorer than the maternal outcome, with a perinatal mortality rate of 104 per 1000 births, more than ten times the overall national rate. The majority of these deaths occurred antepartum.

These results have been published Online First in the journal Gut (available at http://gut.bmj. com/cgi/content/abstract/gut.2008.148676v1), and will be in print later in the year. If you don't have access to this site and would like a reprint, please email us at UKOSS@npeu.ox.ac.uk.

Disorder	Actual number of reported cases	Data collection forms returned (%)	Number of confirmed cases	Expected number of confirmed cases
Amniotic fluid embolism	67	60 (90)	38	36
Antenatal stroke	11	6 (55)	2	29
FMAIT (NAIT)	43	35 (81)	25	75
Extreme obesity (BMI 50 or over)	1019	802 (79)	575	450
Myocardial infarction	31	26 (84)	13	50
Non-renal solid organ transplant recipients	18	15 (83)	14	23
Pulmonary vascular disease	33	28 (85)	16	16
Renal transplant recipients	59	45 (76)	36	82
Therapies for peripartum haemorrhage	77	33 (43)	19	245

Case report summary for current studies to 10/03/08

Thanks to the following hospitals who have returned cards for the last three months:

Aberdeen Maternity Hospital, Aberdeen Airedale General Hospital, Keighley Alexandra Hospital, Redditch Altnagalvin Area Hospital, Londonderry Arrowe Park Hospital, Wirral Ayrshire Maternity Unit, Kilmarnock Barnet and Chase Farm Hospitals NHS Trust, Enfield Barnsley District General Hospital, Barnsley Basildon Hospital, Basildon Bassetlaw District General Hospital, Worksop Birmingham City Hospital, Birmingham Birmingham Women's Hospital, Birmingham Borders General Hospital, Melrose Bradford Royal Infirmary, Bradford Bronglais Hospital, Aberystwyth Burnley General Hospital, Burnley Causeway Hospital, Coleraine Chelsea & Westminster Hospital, London Cheltenham General Hospital, Cheltenham Chesterfield & North Derbyshire Royal Hospital, Chesterfield Colchester General Hospital, Colchester Conquest Hospital, St Leonards-on-Sea Countess of Chester Hospital, Chester Craigavon Area Hospital, Portadown Cumberland Infirmary, Carlisle Daisy Hill Hospital, Newry Darent Valley Hospital, Dartford Darlington Memorial Hospital, Darlington Derriford Hospital, Plymouth Dewsbury and District Hospital, Dewsbury Diana Princess of Wales Hospital, Grimsby Dorset County Hospital, Dorchester Dr Gray's Hospital, Elgin Dumfries & Galloway Royal Infirmary, Dumfries Ealing Hospital, London Eastbourne District General Hospital, Eastbourne Epsom General Hospital, Epsom Erne Hospital, Enniskillen Fairfield General Hospital, Bury Forth Park Hospital, Kirkcaldy Friarage Hospital, Northallerton Frimley Park Hospital, Camberley George Eliot Hospital, Nuneaton Glan Clwyd District General Hospital, Rhyl Good Hope Hospital, Sutton Coldfield Harrogate District Hospital, Harrogate Hereford County Hospital, Hereford Hexham General Hospital, Hexham Hinchingbrooke Hospital, Huntingdon Homerton Hospital, London Hospital of St John and St Elizabeth. London Huddersfield Royal Infirmary, Huddersfield Hull Royal Infirmary, Hull Ipswich Hospital, Ipswich James Cook University Hospital, Middlesbrough James Paget Hospital, Great Yarmouth Jersey General Hospital, St Helier John Radcliffe Hospital, Oxford King George Hospital, Ilford King's College Hospital, London King's Mill Hospital, Sutton in Ashfield Kingston Hospital, Kingston upon Thames Lagan Valley Hospital, Lisbum Leeds General Infirmary, Leeds Leicester General Hospital, Leicester Leicester Royal Infirmary, Leicester Leighton Hospital, Crewe Lincoln County Hospital, Lincoln Lister Hospital, Stevenage Liverpool Women's Hospital, Liverpool Macclesfield District General Hospital, Macclesfield Manor Hospital, Walsall Medway Maritime Hospital, Gillingham Milton Keynes General Hospital, Milton Keynes

New Cross Hospital, Wolverhampton Ninewells Hospital & Medical School, Dundee Nobles Hospital, Douglas North Devon District Hospital, Barnstaple North Manchester General Hospital, Manchester North Middlesex Hospital, London North Tyneside General Hospital, North Shields Northampton General Hospital, Northampton Northwick Park Hospital, Harrow Nottingham City Hospital, Nottingham Peterborough Maternity Unit, Peterborough Pilgrim Hospital, Boston Pontefract General Infirmary, Pontefract Poole Hospital, Poole Princess Anne Hospital, Southampton Princess Elizabeth Hospital, St Martins Princess of Wales Hospital, Bridgend Queen Charlotte's and Chelsea Hospital, London Queen Elizabeth Hospital, Gateshead Queen Elizabeth Hospital, Kings Lynn Queen Elizabeth II Hospital, Welwyn Garden City Queen Elizabeth the Queen Mother Hospital, Margate Queen Mary's Hospital, Sidcup Queen's Hospital, Burton upon Trent Queen's Hospital, Romford Rochdale Infirmary, Rochdale Rosie Maternity Hospital, Cambridge Rotherham District General Hospital, Rotherham Royal Albert Edward Infirmary, Wigan Royal Blackburn Hospital, Blackburn Royal Bolton Hospital, Bolton Royal Cornwall Hospital, Truro Royal Devon & Exeter Hospital, Exeter Royal Hampshire County Hospital, Winchester Royal Lancaster Infirmary, Lancaster Royal Oldham Hospital, Oldham Royal Shrewsbury Hospital, Shrewsbury Royal Sussex County Hospital, Brighton Royal United Hospital, Bath Royal Victoria Infirmary, Newcastle-upon-Tyne Russells Hall Hospital, Dudley Salisbury District Hospital, Salisbury Sandwell District General Hospital, West Bromwich Scarborough Hospital, Scarborough Scunthorpe General Hospital, Scunthorpe Simpson Centre for Reproductive Health, Edinburgh South Tyneside District Hospital, South Shields Southend Hospital, Westcliff-on-Sea Southern General Hospital, Glasgow Southmead Hospital, Bristol Southport & Ormskirk Hospital NHS Trust, Ormskirk St George's Hospital, London St Helier Hospital, Carshalton St John's Unit at Howden, Livingston St Mary's Hospital, London St Mary's Hospital, Newport St Mary's Hospital, Portsmouth St Michael's Hospital, Bristol St Peter's Hospital, Chertsey Stepping Hill Hospital, Stockport Stirling Royal Infirmary, Stirling Stoke Mandeville Hospital, Aylesbury Tameside General Hospital, Ashton-under-Lyne Taunton and Somerset Hospital, Taunton The Great Western Hospital, Swindon The Jessop Wing, Sheffield Torbay Hospital, Torquay Trafford General Hospital, Manchester Ulster Hospital, Belfast University College Hospital, London University Hospital Lewisham, London University Hospital of North Durham, Durham

on Trent University Hospital of North Tees, Stockton-on-Tees University Hospital of Wales, Cardiff Victoria Hospital, Blackpool Warrington Hospital, Warrington Warwick Hospital, Warwick West Cumberland Hospital, Whitehaven West Middlesex University Hospital, Isleworth West Suffolk Hospital, Bury St Edmunds West Wales General Hospital, Carmarthen Western Isles Hospital, Stomaway Wexham Park Hospital, Slough Whipps Cross University Trust Hospital, London Whiston Hospital, Prescot William Harvey Hospital, Ashford Withybush Hospital, Haverfordwest Worcestershire Royal Hospital, Worcester Worthing Hospital, Worthing Wrexham Maelor Hospital, Wrexham Wycombe General Hospital, High Wycombe Wythenshawe Hospital, Manchester Yeovil Women's Hospital, Yeovil Ysbyty Gwynedd District General Hospital, Bangor Antrim Hospital, Antrim Bedford Hospital, Bedford Birmingham Heartlands Hospital, Birmingham Caithness General Hospital, Wick City Hospitals Sunderland NHS Trust, Sunderland Derby Hospitals NHS Foundation Trust, Derby Doncaster Royal Infirmary, Doncaster East Surrey Hospital, Redhill Gloucestershire Royal Hospital, Gloucester Hillingdon Hospital, Uxbridge Hope Hospital, Manchester Horton Hospital, Banbury Kettering General Hospital, Kettering Nevill Hall Hospital, Abergavenny North Hampshire Hospital, Basingstoke Nottingham University Hospitals NHS Trust, Nottingham Prince Charles Hospital, Methyr Tydfil Princess Alexandra Hospital, Harlow Princess Royal Hospital, Haywards Heath Queen Mother's Hospital, Glasgow Raigmore Hospital, Inverness Roval Alexandra Hospital. Paislev Royal Berkshire Hospital, Reading Royal Free Hospital, London Royal Jubilee Maternity Service, Belfast Royal London Hospital, London Royal Surrey County Hospital, Guildford Sharoe Green Unit, Preston Singleton Hospital, Swansea Solihull Hospital, Solihull St James's University Hospital, Leeds St John's Hospital, Chelmsford St Mary's Hospital, Manchester St Richard's Hospital, Chichester The Portland Hospital, London University Hospital of Coventry & Warwickshire, Coventry Wansbeck General Hospital, Ashington Watford General Hospital, Watford Whittington Hospital, London Wishaw General Hospital, Wishaw Calderdale Royal Hospital, Halifax Furness General Hospital, Barrow-in-Furness Mater Infirmorum Hospital, Belfast Mayday University Hospital, Thornton Heath Newham General Hospital, London Norfolk & Norwich University Hospital, Norwich Princess Royal University Hospital, Orpington Royal Glamorgan Hospital, Llantristant Staffordshire General Hospital, Stafford York Hospital, York

New Study – Failed Intubation

Data collection for the new failed intubation study started on 1st April, and the condition will be listed for the first time on the blue card you will get in May. We sent folder documentation about the new study a few weeks ago; if it hasn't arrived, please contact us for another copy.

Background

Reports from the Confidential Enquiries into Maternal Deaths have shown a decrease in the number of anaesthetic related deaths over recent years. However, a consistent cause of death is hypoxia relating to a failure to intubate and ventilate. The incidence of failed intubation among the pregnant population is estimated to be up to 8 times that of the non-pregnant population, but, as yet, no national data exist.

There are several possible reasons why failures might occur more commonly in the obstetric population:

- Physiological changes of pregnancy
- The infrequency of obstetric surgery under general anaesthesia, and therefore lack of training opportunities for junior anaesthetists
- The procedures are frequently required "out of hours" when the trainee anaesthetist is likely not to be working under direct supervision
- Reduced overall training time

Study Objectives

- To use UKOSS to estimate the national incidence of failed intubation in obstetric general anaesthesia, quantify the risk factors and describe management and outcomes.
- To use the results of this study to make practical improvements in prevention and management of failed intubation.

Case definition

Any woman of over 20 weeks gestation given a general anaesthetic (whether on delivery suite or another hospital department) where a failed intubation has occurred.

Failed intubation is defined as failure to achieve tracheal intubation during a rapid sequence induction for obstetric anaesthesia, thereby initiating a failed intubation drill.

Investigators

David Milne, Audrey Quinn, Amanda Pinder, Heather Gorton Leeds General Infirmary

Funding

Obstetric Anaesthetists Association (OAA).

Please note:

This is a case-control study. Reporters will also be asked to complete data collection forms for the two immediately preceding obstetric patients who have had a general anaesthetic. This is different from our usual control selection procedure. If you are uncertain about which control women to select, please get in touch with either Carole or Marian on 01865 289714/289727.



Star Hospitals

More 100% hospitals! Congratulations to the following hospitals that also have 100% card and form returns for 2007, in addition to those reported in the last newsletter.

Borders General Hospital Doncaster Royal Infirmary Dr Gray's Hospital Ealing Hospital **Gloucestershire Royal Hospital** Huddersfield Royal Infirmary James Cook University Hospital Macclesfield District General Hospital Poole Hospital Princess of Wales Hospital, Bridgend Royal Alexandra Hospital Royal Blackburn Hospital **Russells Hall Hospital** St Mary's Hospital, Portsmouth Ulster Hospital Warrington Hospital Worcestershire Royal Hospital

UKOSS Regional Card Return Rates

Congratulations to Northern Ireland, the North East, North West, South West and West Midlands who have all exceeded 90%! Overall cards returns are 89% nationally. If you have any odd cards lying around in your inboxes, please hunt them out and post them back so we can make this even better. Card returns, even reporting no cases, are particularly important to allow us to calculate the denominator number of women giving birth for each UKOSS study.

Card return rates November 2007 to **January 2008**



The Chocolate Box Chocolates for Ann-Marie Whiting from Torbay for perseverance and patience in chasing case notes and forms, and Lisa Whittle from Warrington for patience with cards and forms lost in the post and for 100% card and form returns for the past 18 months. And finally, a big thank you to Carole and Patsy at the NPEU for processing more than 4000 forms for UKOSS over the past three years.

Reminder - RCOG/ UKOSS Award Deadline April 18

The deadline for applications for the RCOG/UKOSS Award, to enable an obstetric trainee to undertake a UKOSS study is April 18. Further details are available at http://www. npeu.ox.ac.uk/ukoss/rcog-ukoss or from Dr Marian Knight on 01865 289727.

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