Massive Transfusion Study Published

Postpartum haemorrhage (PPH) remains a common cause of maternal morbidity and mortality worldwide, however, little is known about the incidence, management and outcomes of women with severe PPH undergoing massive transfusion. The aims of this study were to ascertain the incidence of massive transfusion in obstetrics in the UK, and describe the current management practices and clinical outcome for these women.

The study identified 181 women who had undergone massive transfusion, giving an estimated incidence of 23 per 100 000 maternities (95%CI 19–26). The median estimated blood loss was 6 l (interquartile range 4.5–8.0 l) and the principle causes of haemorrhage were uterine atony (40%), placental abnormalities (33%) and trauma including uterine rupture (19%). At presentation, the median platelet count was lowest for placenta accreta, compared with other causes, while the median prothrombin time and fibrinogen were <1·5 times normal and <3 g/l, respectively for all aetiologies. The median platelet count and fibrinogen fell to <75 × 10⁹ /l and <2 g/l, respectively for all causes during bleeding, except for trauma. In total, 45% of women underwent hysterectomy; women with placenta accreta had the highest hysterectomy rate. Two women died, 82% were admitted to intensive care/high-dependency units, and 28% developed major morbidities.

This study showed that massive transfusion due to PPH is associated with high rates of morbidity and hysterectomy. The coagulopathy in women with PPH undergoing massive transfusion differs significantly depending on its cause, suggesting that more targeted transfusion strategies are required.

References:
Green L, Knight M, Seeney FM, Hopkinson C, Collins PW, Collis RE, Simpson N, Weeks A, Stanworth SS. The epidemiology and outcomes of women with postpartum haemorrhage requiring massive transfusion with eight or more units of red cells: a national cross-sectional study. BJOG 2015 (Epub ahead of print).

Thanks to the following hospitals who have returned cards for December 2015, January and February 2016:

Aberdeen Maternity Hospital, Aberdeen
Airedale General Hospital, Keighley
Altngelvin Area Hospital, Londonderry
Antrim Hospital, Antrim
Ayrshire Maternity Unit, Kilmarnock
Barnet and Chase Farm NHS Trust Maternity Unit, Barnet
Basildon Hospital, Canvey Island
Bassetlaw District General Hospital, Worksop
Birmingham Heartlands Hospital, Birmingham
Birmingham Women’s Hospital, Birmingham
Borders General Hospital, Borders
Bradford Royal Infirmary, Bradford
Brougham Hospital, Chelmsford
Calithness General Hospital, Wick
Calderdale Royal Hospital, Halifax
Causeway Hospital, Coleraine
Chesterfield & North Derbyshire Royal Hospital, Chesterfield
City Hospitals Sunderland NHS Trust, Sunderland
Coventry University Hospitals, Coventry
Craigavon Area Hospital, Portadown
Croydon University Hospital, Thornton Heath
Daisy Hill Hospital, Newry
Darent Valley Hospital, Dartford
Darlington Memorial Hospital, Darlington
Derby Hospitals NHS Foundation Trust, Derby
Derriford Hospital, Plymouth
Dewsbury and District Hospital, Dewsbury
Diana Princess of Wales Hospital, Grimsby
Doncaster Royal Infirmary, Doncaster
Dorset County Hospital, Dorchester
Dr Gray’s Hospital, Elgin
Dunmurry & Galloway Royal Infirmary, Dunmurry
Forth Valley Royal Hospital, Larbert
Frimley Park Hospital, Camberley
George Eliot Hospital, Nuneaton
Glan Clwyd District General Hospital, Bodelwyddan
Gloucestershire Royal Hospital, Gloucester
Good Hope Hospital, Sutton Coldfield
Guy’s and St Thomas’ Hospital, London
Harrogate District Hospital, Harrogate
Hinchingbrooke Hospital NHS Trust, Huntingdon
Homerton University Hospital, London
Hull Royal Infirmary, Hull
Ipswich Hospital, Ipswich
James Cook University Hospital, Middlesbrough
James Paget University Hospitals Trust, Great Yarmouth
Jersey General Hospital, St Helier
Kettering General Hospital, Kettering
King’s College Hospital, London
King’s Mill Hospital, Sutton in Ashfield
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 Hospital NHS Foundation Trust, Milton Keynes
Nevill Hall Hospital, Abingdon
Nine Wells Hospital & Medical School, Dundee
Nottingham University Hospitals
Norfolk & Norwich University Hospital, Norwich
North Devon District Hospital, Barnstaple
North Manchester General Hospital, Manchester
Northampton General Hospital, Northampton
Northwick Park Hospital, Harrow
Nottingham City Hospital, Nottingham
Peterborough City Hospital, Peterborough
Pilgrim Hospital, Boston
Pinderfields General Hospital, Wakefield
Poole Hospital, Poole
Prince Charles Hospital, Methyrdifi
Princess Alexandra Hospital, Harlow
Princess Anna Hospital, Southampton
Princess Elizabeth Hospital, St Martins
Princess Royal Hospital, Telford
Queen Charlotte’s and Chelsea Hospital, London
Queen Elizabeth Hospital, Gateshead
Queen Elizabeth Hospital, Kings Lynn
Queen Elizabeth Hospital, London
Queen Elizabeth the Queen Mother Hospital, Margate
Queen’s Medical Centre, Nottingham
Rai More Hospital, Inverness
Royal Albert Edward Infirmary, Wigan
Royal Alexandra Hospital, Paisley
Royal Cornwall Hospital, Truro
Royal Devon & Exeter Hospital, Exeter
Royal Glamorgan Hospital, Llantrisant
Royal Oldham Hospital, Oldham
Royal Preston Hospital, Preston
Royal Surrey County Hospital, Guildford
Royal Sussex County Hospital, Brighton
Royal Victoria Infirmary, Newcastle-upon-Tyne
Russells Hall Hospital, Dudley
Scarborough Hospital, Scarborough
Scunthorpe General Hospital, Scunthorpe
Simpson Centre for Reproductive Health, Edinburgh
Singleton Hospital, Swansea
South Tyneside NHS Foundation Trust, South Shields
South West Acute Hospital, Enniskillen
Southend University Hospital NHS FT, Westcliff
Southend General Hospital, Southend
Southmead Hospital, Bristol
St Helier Hospital, Carshalton
St James’s University Hospital, Leeds
St John’s Hospital, Livingston
St Mary’s Hospital, London
St Mary’s Hospital, Manchester
St Mary’s Hospital, Newport
St Michael’s Hospital, Bristol
St Peter’s Hospital, Chertsey
St Richard’s Hospital, Chichester
Stoke Mandeville Hospital, Aylesbury
Taunton and Somerset Hospital, Taunton
The Great Western Hospitals NHS Foundation Trust, Swindon
The Hillingdon Hospitals NHS Foundation Trust, Uxbridge
The Portland Hospital , London
The Tunbridge Wells Hospital, Tunbridge Wells
Torbay Hospital, Torquay
Ulster Hospital, Belfast
University Hospital Lewisham, London
University Hospital of Coventry & Warwickshire, Coventry
University Hospital of North Durham, Durham
University Hospital of North Staffordshire, Stoke on Trent
University Hospital of North Tees, Stockton-on-Tees
University Hospital of Wales, Cardiff
Victoria Hospital, Blackpool
Victoria Hospital, Kirkcaldy
Wansbeck General Hospital, Ashington
Warrington and Halton Hospitals NHS FT, Warrington
Warwick Hospital, Warwick
West Cheshunt General Hospital, Whitehaven
West Middlex University Hospital, Islington
West Suffolk Hospital, Bury St Edmunds
West Wales General Hospital, Carmarthen
Western Isles Hospital, Stornoway
Wexham Park Hospital, Slough
Whiston Hospital, Southgate
William Harvey Hospital, Ashford
Wiseman General Hospital, Whisby
Worcestershire Royal Hospital, Worcester
Wrexham Maelor Hospital, Wrexham
Yeovil Women’s Hospital, Yeovil
York Hospital, York
Ysbty Gwynedd District General Hospital, Bangor
Birmingham City Hospital, Birmingham
Chelsea & Westminster Hospital, London
East Surrey Hospital, Redhill
East Sussex Healthcare NHS Trust , St Leonards-on-Sea
Epsom General Hospital, Epsom
Furness General Hospital, Barrow-in-Furness
Horton Maternity Hospital, Banbury
Kingston Hospital, Kingston upon Thames
Leicester General Hospital, Leicester
Luton & Dunstable Hospital, Luton
New Cross Hospital, Wolverhampton
North Hampshire Hospital, Basingstoke
Princess of Wales Hospital, Bridgend
Princess Royal Hospital, Haywards Heath
Princess Royal Maternity Hospital, Glasgow
Queen’s Hospital, Burton upon Trent
Queen’s Hospital, Romford
Rosie Maternity Hospital, Cambridge
Royal Berkshire Hospital, Reading
Royal Bolton Hospital, Bolton
Royal Lancaster Infirmary, Lancaster
Royal United Hospital, Bath
Southport & Ormskirk Hospital NHS Trust, Ormskirk
St George’s Hospital, London
Stepping Hill Hospital, Stockport
Tameside General Hospital, Ashton-under-Lyne
Whitlingham Hospital, London
Worthing Hospital, Worthing
Arrow Park Hospital, Wirral
Barnsley Hospital NHS Foundation Trust, Barnsley
Bedford Hospital, Bedford
Hereford County Hospital, Hereford
John Radcliffe Hospital, Oxford
Lancashire Women and Newborn Centre, Burnley
Queen Alexandra Hospital, Portsmouth
Royal Free Hospital, London
Royal Gwent Hospital, Newport
Royal Hampshire County Hospital, Winchester
Royal Jubilee Maternity Service, Belfast
Salisbury District Hospital, Salisbury
University College Hospital, London
Watford General Hospital, Watford
Wythenshawe Hospital, Manchester
Colchester General Hospital, Colchester
Cumberland Infirmary, Carlisle
Leeds General Infirmary, Leeds
Leicester Royal Infirmary, Leicester
Newham General Hospital, London
North Middlesex University Hospital, Edmonton
Princess Royal University Hospital, Orpington
Rotherham District General Hospital, Rotherham
Royal London Hospital, London
The Jessop Wing, Sheffield
Whips Cross University Trust Hospital, London

Follow us @NPEU_UKOSS
New UKOSS study has started!
Zika Virus in Pregnancy: how to report

A new UKOSS study on Zika virus in pregnancy began in March 2016. The reporting for this study is slightly different to other UKOSS studies.

On each monthly report card, reporters are requested to report the numbers of women in their unit who fall into each of the following categories:

1. Any pregnant woman with a history of travel to a country with active Zika virus transmission during pregnancy or 4 weeks before conception and no adverse pregnancy outcome.

2. Any pregnant woman with a history of travel to a country with active Zika virus transmission during pregnancy or 4 weeks before conception where there has been an adverse pregnancy outcome, such as a fetal abnormality, miscarriage, stillbirth, neonatal death or termination of pregnancy.

Please note that reporters will only be requested to complete a data collection form for those women who did experience adverse pregnancy outcomes.

You will have recently received the first card featuring Zika reporting, which looks like this:

If you have any queries, then please don’t hesitate to get in touch with the UKOSS team at ukoss@npeu.ox.ac.uk

Case report summary for current studies up until the end of Feb 2016

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Actual number of reported cases</th>
<th>Data collection forms returned (%)</th>
<th>Expected number of confirmed cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amniotic Fluid Embolism</td>
<td>223</td>
<td>214 (96)</td>
<td>133</td>
</tr>
<tr>
<td>Aspiration in Pregnancy</td>
<td>13</td>
<td>11 (85)</td>
<td>37</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>21</td>
<td>9 (43)</td>
<td>25</td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>53</td>
<td>41 (77)</td>
<td>52</td>
</tr>
<tr>
<td>Epidural Haematoma or Abscess</td>
<td>15</td>
<td>12 (80)</td>
<td>4</td>
</tr>
<tr>
<td>Epilepsy in Pregnancy</td>
<td>111</td>
<td>57 (51)</td>
<td>210</td>
</tr>
<tr>
<td>Gastric Bypass in Pregnancy</td>
<td>307</td>
<td>250 (81)</td>
<td>69</td>
</tr>
<tr>
<td>Pulmonary Embolism</td>
<td>201</td>
<td>139 (69)</td>
<td>150</td>
</tr>
<tr>
<td>SHiP</td>
<td>1</td>
<td>1 (100)</td>
<td>2</td>
</tr>
</tbody>
</table>

Epilepsy study: identifying controls

The Epilepsy study is a case-control study and we will soon be requesting data for the controls. Reporters will be asked to complete data collection forms for the first two women who deliver in their unit in June 2016 who have epilepsy but do not meet the criteria for UKOSS cases. We will shortly be circulating further information regarding the identification of controls; however in the meantime, please contact ukoss@npeu.ox.ac.uk if you have any queries.
Meet longstanding UKOSS reporter, Anne-Marie Whiting

Who is your employer and what is your job title?
I am employed part time by Torbay and South Devon NHS Foundation Trust and I am employed as the Clinical Governance Coordinator for Obstetrics and Gynaecology.

Can you give a brief summary of your career to date?
I undertook my midwifery training in Exeter in 1988, and came to work at Torbay after qualifying. I initially worked on the special care baby unit whilst waiting for a midwifery vacancy. I have worked in both hospital and community settings within the Trust. I was involved in setting up the first pilot team midwifery in 1992. I became a supervisor of midwives in 1998, and I have been in my current post since 2002.

What are the main duties/responsibilities of your current role?
I have a very varied role I manage all the clinical incidents, undertake serious case reviews, and manage the review of all the policies and guidelines. I coordinate audit, complaints and litigation in the department. I lead the review of National reports and NICE guidance. I am also the contact Supervisor of Midwives.

What do you enjoy most about your current job?
I work within a very supportive team of midwives, medical staff, and also the administrative support team. I share an office with three Matrons and we have a great camaraderie. The trust values the role and I have two midwives who support, Jo Blacker who is an audit midwife and Helen Saad who also works one day in Clinical Governance with me.

How does being a UKOSS reporter add to your role at work (if at all)?
Being in this role for this amount of time I have reported and investigated many of the studies that UKOSS have undertaken. I have investigated maternal deaths into some of the rare direct causes, and seen the learning come into practice from the studies. Reading around the new studies also gives me a new understanding of the rare conditions.

How long have you been a UKOSS reporter?
I have been a UKOSS reporter since its inception!

How do you manage/co-ordinate the UKOSS reporting in your hospital?
We are a relatively small unit with approximately 2500 deliveries a year, however Torbay is the most deprived council in the south west which brings with it many other socio economic challenges. I receive the “blue cards” and through our regular case reviews and meetings am able to identify cases. We have the UKOSS posters up in the antenatal clinic and inform all midwifery and medical colleagues both obstetric and anaesthetic of the studies. I respond to requests when cases are low in numbers via email to the individual teams. Jo and Helen support me so between us we strive to identify cases, and complete the forms timely and thoroughly!

Would you recommend becoming a UKOSS reporter to others and why?
I would definitely recommend it. It alerts you to present studies, and it’s really rewarding seeing the study results. Ultimately you are helping to improve the outcome for women and their babies. Oh yes, and great for nursing and midwifery revalidation!

Do you have any hobbies/what are your interests outside of work?
I swim (quite well), and play tennis (not so well) regularly. I also enjoy walking around the South Devon coastline, and I am in the process of trying to complete all the sections of the South West Coast Path. I enjoy reading and always have a book on the go.

Gastric Bypass
This study has now ended. Please can all UKOSS reporters check that they have reported all cases of women delivering between 1st April 2014 and 1st April 2016 following gastric bypass surgery, and ensure that any outstanding data collection forms are completed and returned as soon as possible. Thank you.

Chocolate Box
Chocolates this month go to Mrs Sally Budgen at Royal Cornwall Hospital and Ms Susan Weekes/Judith Lowther at Bradford Royal Infirmary for timely return and accurate completion of cards and data collection forms.

Many thanks to you both!

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Email: UKOSS@npeu.ox.ac.uk      Web: www.npeu.ox.ac.uk/UKOSS

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