

Investigators:

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Professor Khalid Khan, Professor of Obstetrics-Gynaecology & Clinical Epidemiology & Honorary Consultant
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Miss Jane Daniels, Research Fellow
Mr Andrew Howman, Statistician
Professor Siobhan Quenby, Professor of Obstetrics & Gynaecology
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Dr Jackie Ross, Consultant Obstetrician & Gynaecologist
Dr Marjory MacLean, Consultant Obstetrician & Gynaecologist
Mr Peter Thompson, Consultant in Fetal Medicine
Dr Feroza Dawood, Consultant Obstetrician & Gynaecologist

Project lead: Dr Arri Coomarasamy

Institutions:

Birmingham Women's Hospital/University of Birmingham
University Hospitals Coventry & Warwickshire NHS Trust
Birmingham Heartlands Hospital
King's College Hospital NHS Foundation Trust
University College London Hospitals NHS Foundation Trust
Liverpool Women's NHS Foundation Trust
Nottingham University Hospitals NHS Trust
Crosshouse Hospital , Scotland
St Mary's Hospital, London
Guy's and St.Thomas' Hospital, London
Chelsea and West Minister Hospital
Ealing Hospital NHS Trust, London
Leicester Royal Infirmary
City Hospital Birmingham
University Hospital of North Staffordshire
Southampton University Hospital
St Mary's Hospital, Manchester
Princess Royal Maternity (Glasgow Royal Infirmary)
Borders General Hospital
Southern General Hospital (Glasgow)
NHS Lanarkshire (3 units)

BTF involvement: Letter of support for funding

Timescale: It is anticipated that the trial will last for 4 years and 4 months (52 months in total), starting 1st September 2011.

Approximately 10-20% of women of child-bearing age have thyroid antibodies. In such women, the risks of miscarriage and preterm birth are more than doubled compared with those who do not have thyroid antibodies. Miscarriage is the commonest complication of pregnancy, affecting 1 in 5 women. Preterm birth occurs in 6-10% of pregnancies. Up to 85% of new-born deaths are due to preterm births, and of those who survive, approximately 10% suffer long-term disability. The human cost of preterm birth is therefore enormous; the financial cost of preterm birth is estimated at £939 million/year in the UK.

There is evidence from two small studies that giving levothyroxine tablets to women with thyroid antibodies may halve the risk of miscarriages and preterm births. However, the evidence is not strong enough for recommending levothyroxine treatment: we surveyed 183 clinicians (endocrinologists and obstetricians), and 85% of them said they required more research before they would be confident to use this treatment in routine practice. We are, therefore, proposing a large and high quality trial to study this question, with live birth beyond 34 weeks of pregnancy as the primary outcome. This trial is called the TABLET (Thyroid AntiBodies and LEvoThyroxine) study, and 21 hospitals in the UK are scheduled to take part in this study. Evaluation of Efficacy and Mechanism (EME) programme of the Medical Research Council (MRC, UK) has provisionally agreed to fund the TABLET study.

Dr A Coomarasamy

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