



ACU and University Pioneer DIY fertility test

One of the presentations at the Annual Clinical Report

day was 'Over the counter test kits for male fertility'. This product has now been launched on the open market.

A new fertility testing kit has been developed by Scientists from the Assisted Conception Unit and the University of Birmingham's Reproductive Biology and Genetics Department. The sperm testing kit called 'Fertell' has been developed for men to use at home.

The kit has been ten years in the making and was a concept initially thought of by Professor Chris Barrett, Scientific Director of the Assisted Conception Unit. The thinking behind the development of the kit is that if men need to produce a sample for testing, they would be much more comfortable doing this at home rather than in a clinical environment.

Jackson Kirkham Brown, who is the Research and Development Manager for the ACU as well as a research fellow at the University, has been involved in the development of the kit and he explained, "If men are going to test their sperm themselves, then we needed to develop a kit that was accurate. The kit tests a concentration of motile human sperm (this means that they can move by themselves) to give an indication of whether the sperm is suitable to fertilise an egg naturally."

The kit counts 10 million motile sperm as the World Health Organisation's definition for a low amount is under 10 million. Once the sperm sample has been placed in the kit it mixes with a liquid which replicates the fluid in the female reproductive tract, if the number of motile sperm is over 10million and the test has worked, then two positive lines are indicated in red. The results of the test appear in less than an hour, so it's easy and convenient to use. If the test results are not positive, then men will be able to seek further guidance.

It is estimated that 20% of the UK Population have a fertility problem. This product will certainly help to reduce the anxieties for those men who have to have this test.

Clinical Chemistry

This year a new main biochemistry analyser was introduced to maintain comparability of results with those produced out-of-hours by the Children's Hospital, and an in-house service for tumour markers is now available.

The antenatal screening workload has risen, with work coming from an additional two trusts. We remain the largest laboratory in the UK screening for neural tube defects and Down's syndrome, and we support four different screening strategies.

An audit of Triple testing for antenatal detection of Down's syndrome, introduced in August 2003, showed performance (detection rate, 76% and false positive rate, 4.1%) which exceeds the national current quality guidelines. An audit of the first 1958 pregnancies screened by a new superior strategy (Integrated testing) showed performance well in excess of the NICE guidelines to be achieved by April 2007. We are the only laboratory in the UK offering this service for NHS patients.

Another large increase in the number of glucose tolerance tests was noted and this is the subject of an ongoing audit.

Midwifery

It has been another busy year. Having successfully achieved CNST Level 2 we are working towards maternity standard Level 3. Midwifery shortages remain a huge issue for us as it does nationally. The number of births in the trust have also increased which provide additional challenges.

The midwifery led birth centre has been successfully implemented which provides an additional choice for women. A local implementation group has been established to plan and shape our service in line with the National Service Framework for Children, young people and Maternity Services published in 2004. We have a newly refurbished bereavement suite and work is underway to improve the triage environment on the delivery suite for women needing assessment. We continually strive to improve the service for all the woman in our care.

the Editorial Team

Professor Khalid Khan, Professor of Obstetrics, Gynaecology and Clinical Epidemiology and Christine Yarnold are the editor and co-ordinator of this report.

This year a new electronic format was developed to ensure that authors could return information in a prepared format. The Report is also now available on the Trust Website.

Christine Yarnold in her role as Quality Co-ordinator for the Trust prepares the report behind the scenes. She is responsible for making sure every speciality is included and the whole report is published on time.



Professor Khan presents Christine with a well deserved Bouquet



Hospital Clinical Report

Highlights Achievements & Challenges

Birmingham Women's Health Care 
NHS Trust

The Trust's Annual Clinical Report presentation Day took place on 18th November 2005. This special event represented the achievements and challenges which have taken place throughout 2004/05 with a number of presentations from Departments throughout the day. The Hospital Clinical Report is produced annually and is now in its 32nd year. The report aims to document learning and achievements and is a critical reflection which can help the Trust and specialties to identify problems and devise solutions. The presentation day was valuable in terms of reminding us what we had achieved and how we can take this forward.

Departments had been invited to enter the Clinical Audit competition for presenting on the day and joint winners were:

Charlotte King, Neonatal Sister and Infection Control Link Nurse for her audit 'Infection Control – What do staff know?'

Sue Standing, Consultant Clinical Scientist for her audit in 'Downs Syndrome Screening by Integrated Testing'.

They received gift vouchers presented by the Chief Executive, Julie Burgess.



Charlotte King and Sue Standing

From the Assessor

To help us further our learning and approach to our practice we obtain external assessment. This year we were fortunate to have Professor James Neilson, Head of Reproductive and Developmental Medicine from the University of Liverpool and Liverpool Women's Hospital. Professor Neilson congratulated us on our report and presented a thorough critique of the document with acknowledgments on where we might further improve our practice in future. This is the second time that Professor Nielson has provided the external validation, he had found the report both interesting and exciting.

The Professor commented on many aspects of the report and areas to note included:

Integrated Care Pathways (ICP) - very impressed with the work which had taken place.

Risk Management - he commented was clearly an important issue and gave congratulations to our achieving. Maternity Standards Level 2 CNST.

Research and Development – this takes up a substantial part of the report and Professor Neilson thought that within the R&D themes there was a great deal of diversity. He suggested that in future we may wish to propose a tighter research strategy with a smaller number of themes aimed at achieving national or international recognition.

Education Research Centre - he said that there were lots of exciting projects and made reference to the Evidence Based Medicine (EBM) project and the number of Specialist Registrars who had been trained in EBM and the 45 consultants now trained in teaching EBM.

The Undergraduate Teaching programme - had a very good curriculum and a rigorous exam process.

Fetal Medicine - Professor Neilson was grateful to fetal medicine for the TTTS Service available from the Women's (Twin Twin Transfusion Syndrome).

Birth Centre - The Professor enjoyed reading this part of the report and Paula Clarke's presentation. He congratulated the Centre on its first birthday and the ICP stating that the Centre was a very exciting development of which to be proud.

The Neonatal Unit - had excellent results of babies admitted and going home.

Gynaecology - Highlights included the training of a new Nurse Vulvoscopist and the development and the involvement of specialist nurses in menopause. The ICP for early pregnancy bleeding was a really good development.

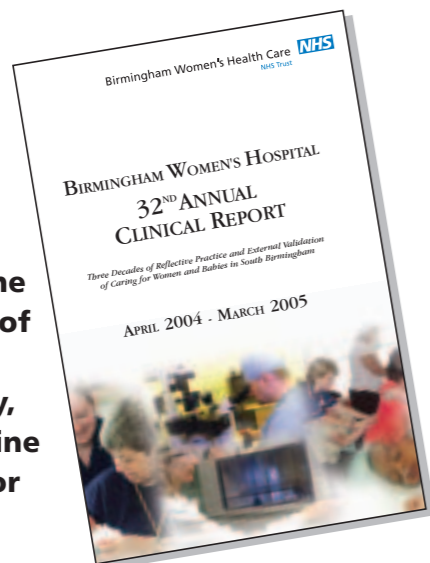
Anaesthetics - featured lots of detail and he was impressed with the routine follow up of all women who undergo a general anaesthesia.

Clinical Genetics – impressed with the National Genetics Education Centre which was meeting the needs of NHS Staff. The development of special clinics to bring genetics into the mainstream and the modernisation of the Regional Genetics Laboratory.

Clinical Chemistry – again impressed and made reference to Sue Standing's presentation producing good results.

Finally, Professor Neilson looked at what our challenges had been and if we had achieved them. In most cases we were focused and clear on what we needed to do and were working towards achieving the challenges we had set ourselves. In terms of challenges for the future, Professor Neilson suggested that we may wish to develop a more focused research strategy and look towards recruitment to multinational research trials.

Over the following pages are just some summaries from the Annual Clinical Report which reflect the excellent work taking place across the Trust. For a full copy of the Report which covers every specialty, please contact Christine Yarnold on ext 4749 or via email.



Fetal Medicine

The Fetal Medicine Centre is a regional referral unit for the investigation and treatment of fetal abnormality, high risk pregnancy and pregnancy loss. In 2004-2005 the Centre saw 2095 patients. 4468 examinations were performed in the Fetal Medicine scan clinics, and there were 827 attendances to the pregnancy loss clinics.

In the year 2004-2005 the Centre implemented a laser fetoscopy service for the treatment of twin-twin transfusion syndrome and hopes to further expand its remit of services in the future to best serve the West Midlands.

The Centre continues to ensure the quality of its service through constant monitoring of its work against national standards and the best research evidence. Information about the services offered by the centre and full details of our activity and quality indicators can be found in our regional annual report which is posted on our website at: www.fetalmedicinebirmingham.co.uk

Regional Genetics Laboratory

The West Midlands Regional Genetics Laboratory provides a comprehensive genetic testing service to the population of the West Midlands.

The department provides all types of genetic testing primarily for NHS patients but also for private consultants and hospitals. Staff work closely with specialists clinicians around the region to aid diagnosis and treatment of a huge variety of inherited diseases.

Over 27,500 samples have been analysed within the genetics laboratory this year, this is an increase of over 1,000 samples compared to last year. The main areas which are contributing to this increase remain Molecular Genetics and Oncology which continue to show a steady increase in activity. Molecular Genetics now incorporates rapid QF-PCR testing which enables pregnant women to have Downs Syndrome test results in a matter of days rather than weeks. The increase in Oncology workload continues to reflect the success of the developments in testing for acute leukaemia and bone marrow transplantation.

Undergraduate Education

- Birmingham Women's Hospital has been able to accommodate the increased number of students.
- A new facility has been built from funds from the Medical School. This will provide additional teaching space and accommodation for a Clinical Skills Laboratory.
- More teaching support is planned with the appointment of a new Clinical Tutor with special interests in undergraduate education and the appointment of a new Clinical Sub-Dean.

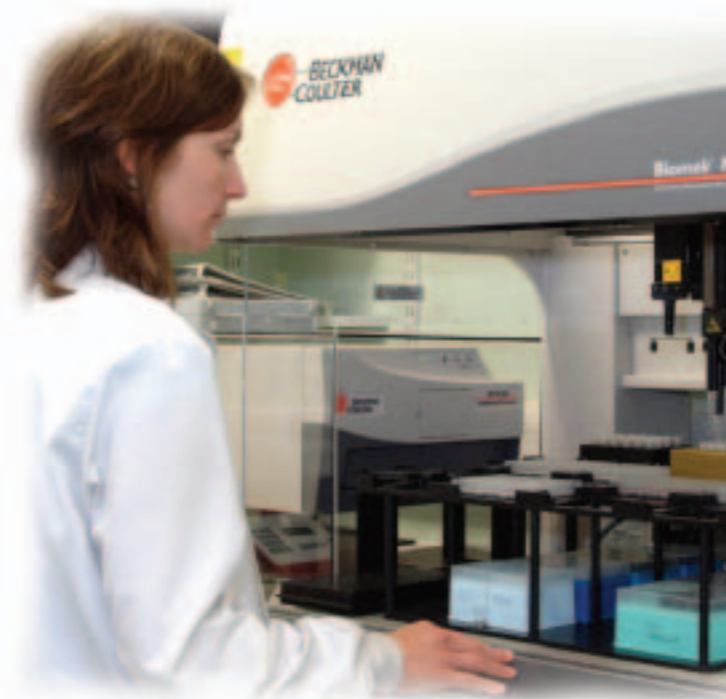
Research & Development

The main objective of the R&D Directorate is to ensure that Research Governance is at the forefront of all research activity at the Trust. This includes supporting active researchers in the formulation and conduct of research, to provide support and implement initiatives to increase the level of non-commercial grant income and to provide a general research culture to support multidisciplinary research.

Current research activity falls into the following programmes:

- Fetal Precursors of Cardiovascular Disease in Adults
- Health Technology Assessment of Gynaecological and Obstetric Complaints
- Genetic Basis of Human Disease
- Women's Cancer
- Reproductive & Vascular Biology

These programmes attracted over £1.9 million grant income and produced 97 peer reviewed publications in 2004/5, both of which are testament to the strength of the programmes. Programme activity has been highly commended by the Department of Health.



Neonatology

There are and have been many changes within the neonatal services but the directorate has engaged the ethos of change with enthusiasm and commitment. Adaptation nurses have completed their initial preceptorship and are settling into their roles as neonatal nurses. It is envisaged they will go on to start the neonatal pathway in 2006.

Transitional care, baby clinic, milk bank and community neonatal services have worked extremely hard alongside their colleagues to make the neonatal directorate a positive place to work and develop.

There were 622 admissions during the year, our smallest babies with a birth weight of less than 750g did exceptionally well.

Of 18 babies of less than 750g admitted, 15 went home (83%). This survival figure reflects the high skills achieved by the clinical team of nurses and doctors.

We are in the process of redesigning our clinical educator post and the community neonatal service. This also leads onto the future recruitment and retention drives which we are engaging with vigour to plan for our envisaged level 3 perinatal centre status, within the newborn network. We will be increasing our Advanced Neonatal Nurse numbers by at least one by next year after one of our experienced nurses has completed the training in 2006.



Anaesthetics

Overall activity has increased with a rising number of deliveries and admissions of sick mothers to the High Dependency Unit. The epidural rate in labour is stable with a slightly improved satisfaction rate.

The regional anaesthetic rate for CS has improved. Although complications from anaesthesia continue to occur, these have in general been dealt with appropriately.

Risk Management

The Risk Management agenda for 2005/06 will continue with the maintenance of our current risk management strategy and this will significantly develop during the coming year in line with National and local changes required and in line with ongoing developments within the Trust.

Gynaecology

Gynaecology and Maternity Services Directorates merged in 2004/05. Key objectives achieved for gynaecology included providing quality emergency and elective services whilst improving access and waiting times by:

- No outpatient waiting more than 13 weeks
- No inpatient waiting more than 6 months & no more than 538 patients on waiting list by 31.03.2005
- Increased patient involvement
- Activity delivered in financial balance

Work continued on Essence of Care Clinical Benchmarking and Care Pathways. Modules in progress include personal hygiene, nutrition, pressure ulcers and record keeping. Work on the continence module was combined with ICP work. Other ICPs in progress include early pregnancy problems, menopause and major elective surgery.

Clinical Genetics

Over the year, almost 6000 new appointments were offered in over 25 different clinic locations across the West Midlands.

Genetics is advancing rapidly as we have more to offer to an increasing number of patients. Government funding has allowed us to recruit staff to address how we reach people who could benefit from these advances. As clinical genetic services develop there is increased specialisation. Working with physicians, surgeons and paediatricians we are using new molecular genetic services to help neurology, renal, endocrine and cardiology patients.

The benefits of advances also extend to some of our existing patients. Increasingly we can diagnose undiagnosed conditions or offer a genetic test where none was previously available. A significant challenge is to look at how we deliver the benefits of new tests and knowledge to previous patients as well as those who may not yet be aware of what our service has to offer.