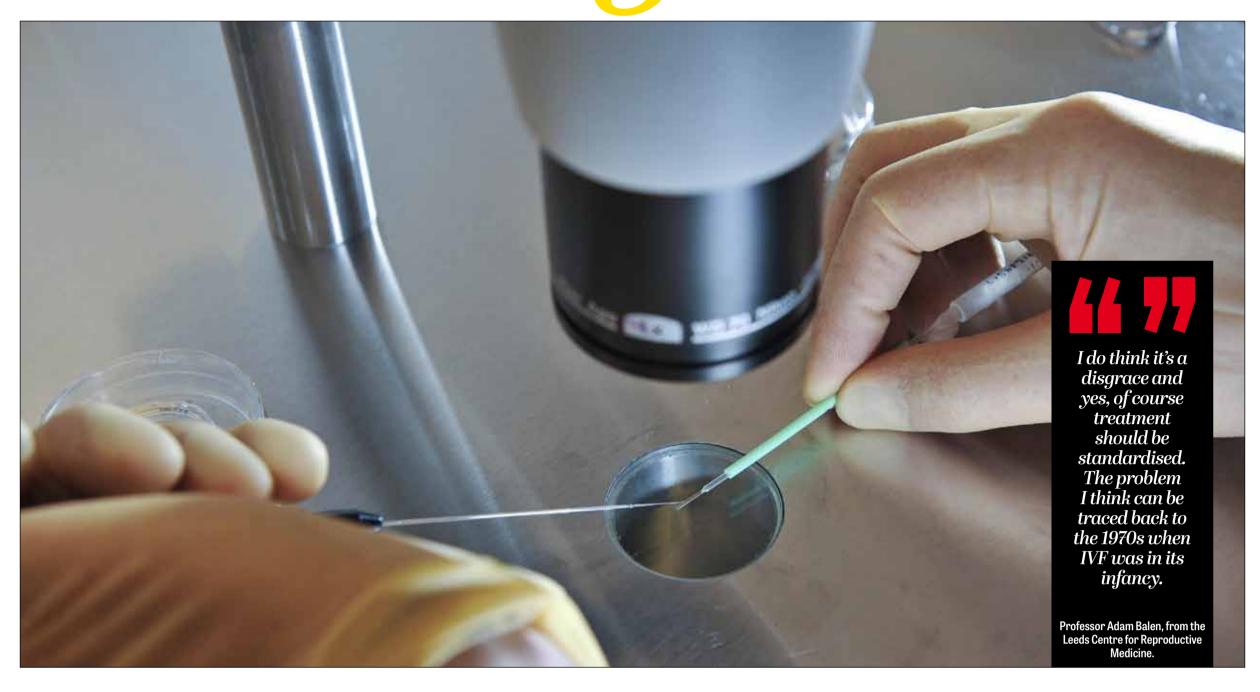
Features

Comment



'END THE IVF BABY LOTTERY'

IN 1978 Louise Brown was making history as the world's first test tube baby. That same year Adam Balen was studying for his A-levels and hoping for a career in medicine.

Three and a half decades on, Brown now has a child of her own, there have been a further five million babies born the world over as a result of IVF and that A-level student is now a leading authority on fertility.

Based at Leeds Teaching Hospitals, where he is Professor of Reproductive Medicine and Surgery, he was recently elected Chair of the British Fertility Society at a time when IVF has just taken another historic leap forward.

This week in a free vote in the Commons, 382 MPs voted in favour of the UK becoming the very first country to allow the creation of three-person babies. While the move was opposed by religious and pro-life groups, the technique, pioneered in Newcastle, can be used to combat mitochondrial disease which can lead to brain damage, muscle wasting, heart failure and blindness.

"Some opponents say we should concentrate on finding a cure for mitochondrial disease," says Professor Balen. "But there is no cure. Mitochondria are basically a cell's battery and if they are defective they cause horrendous disability which often results in death after one or two days. This new technique replaces the defective mitochondria with healthy ones from a donor embryo.

"It doesn't contribute any genetic material and I don't have any moral concerns about it. While it is right that the ethics and science of what we do is challenged, IVF is extremely strictly

regulated." While the number of babies born each year with the most severe form of the condition is small - around 150



Politicians may have voted in favour of three-person babies, but it will take more than that to revolutionise access to fertility treatment. Sarah Freeman

reports.

- the vote in favour has been seen as a landmark in IVF. However, according to Professor Balen a much greater leap forward would be to end the disparity which exists in fertility treatment between different parts of the country. Greater recognition and investment by the NHS would also be on that same

Depending where you live, access to IVF varies greatly. In West Yorkshire. those who meet the eligibility criteria can have one cycle for free, in Cumbria it's two and while in 2014 North Yorkshire lifted its ban on IVF treatment for the first time in three years, it is often one of the first treatments to be axed when budgets

become tight. "I do think it's a disgrace and yes, of course treatment should be standardised," says Prof Balen. "The problem I think can be traced back to the 1970s when IVF was in its infancy. There was a huge amount of opposition to those early pioneers who were seen as somehow playing God. That meant some areas were more reluctant than others to embrace IVF and it has led to the differences in treatment that we

still see today." While now a leading expert, not just in IVF, but also polycystic ovary syndrome and disorders of sexual development, Prof Balen was on the path to becoming a GP until he spent a year in Africa following medical school.

"I was posted to a bush hospital and ended up spending much of my time in obstetrics and gynaecology. When I came back I was told that my year over there wouldn't be recognised so I needed to do another 12 months of training. I wanted to do something new and exciting and at the time IVF was really taking off.

He ended up working with Sir Robert Edwards who had founded the first ever IVF programme in Britain and it was his work, along with that of Patrick Steptoe, that revolutionised approaches to infertility. Edwards was belatedly awarded the Nobel Prize in 2010, but by then was 85 and too ill to receive the award in person.

Today, IVF has been brought into the mainstream, but those who work in the field still occasionally feel like the poor relations of the NHS.

The Leeds Centre for Reproductive Medicine at Seacroft Hospital is one of the leading clinics of its kind in the UK. However, while the facilities are world class its housed in an old Victorian hospital which has itself has become something of a building site as various

parts have been sold off for housing. "I have no doubt that when some people come for their first appointment they wonder what they are wandering into. However, I hope that when they get to reception any concerns they may have disappear."

However, with NHS funding restricted, it's only by taking on private patients that the centre can fund some of the state-of-the art equipment which increases the success rate of procedures like IVF. In the last 18 months the team has invested in three new embryoscopes which take precise time-lapse images of the embryos in incubation. A fourth is on order, but at £70,000 apiece being world class does not come cheap.

"Before we had the equipment, once a day our embryologists would take the fertilised embryos and put them under the microscope to see which ones were developing best and therefore which ones had the optimum chance of leading to pregnancy," says Prof Balen. "That process in itself disturbs the environment of the embryo and only provides one static snapshot in time. Our new system takes a picture every 10 minutes and does so without disturbing the embryo at all. We have

The pioneers who defied the odds

■ When the first IVF babies were born in the late 1970s, treatment was expensive with each cycle of IVF costing £3,000, at a time when the average annual income was around

£6,000. Success rates in the early years averaged around 12 per cent. Today old, the success rate is nearer 50 per

It is estimated at least one in six couples seek the help of infertility specialists.

Doctors from Belgium believe the work they have done could eventually cut the cost of IVF from thousands of pounds to around £170. ■ Most recent figures show an annual IVF birth rate of more than 17,000 babies in the UK.

approached the NHS to see whether it would be willing to increase the amount it pays for a cycle so we could use the same equipment for all our patients, but the answer was no.

"At the moment we would be looking at around £700 a cycle, but that would come down once we pay for the equipment. While most companies set money aside for necessary upgrades and investment in equipment, it's something, historically, the NHS has been very bad at. It has no idea how to run a business and by that I don't mean how to exploit commercial opportunities, I just mean it is inefficient."

A decade or so ago, the waiting list for IVF treatment at Leeds was typically two to three years. Now there is no waiting list and in fact the Seacroft centre has unused capacity. In a typical year it will complete around 1,500 IVF cycles, but they could do nearer to

"We offer much more than IVF and we can offer much more than a private clinic. If you need corrective surgery we can do that, if you have complications in pregnancy then our team will be there.

It's that kind of expertise housed in one centre, which means that Prof Balen is also against moves currently being mooted to shorten consultant training. "When I was starting my career it was long before the European Working Time Directive. Yes, we worked horrendously long hours, but it meant our skill foundation was absolutely solid. Now I see consultants from district hospitals who even now are unable to do basic surgery. That's not good for the profession and it's certainly not good for patients."

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LABOUR OF LOVE: Professor Adam Balen, who is based at Leeds Teaching Hospitals, has been at the forefront of fertility treatment for more than 20 years.

Why age is not always a barrier to sporting greatness

TOMORROW IT'S exactly 50 years since Stoke City played Fulham in the

old First Division. So what, you might say? Ordinarily you'd be right (sorry Stoke and Fulham fans), but this happened to be Stanley Matthews' final match before he retired at the age of 50.

Even today, when athletes can stay fitter for longer, most sports stars have long since hung up their boots, bats, or rackets by the time they reach this

venerable sporting age. But the man they called "The Wizard of Dribble" enjoyed a remarkable career - he played 701 league and cup games, scoring 71 goals, and was capped 84 times for England. The fact he did so in an era when pitches often resembled ploughed fields and referees had a laissez-faire attitude when it came to hard tackling, makes his longevity all

the more astonishing. Pele once said that Matthews "taught

It's half a century since Sir Stanley Matthews played his final top flight football match at the age of 50. Chris Bond wonders whether sports stars

could do the same today. us the way football should be played",

but skill alone wasn't the sole reason why he was able to last as long as he did (he played his last match for England when he was 42).

He was one of the first footballers to appreciate the benefits of a healthy diet, eating plenty of fruit and salads and even fasting once a week, while many other players washed down their

pie and chips with a few pints of beer. These days it's usually only

goalkeepers who are able to keep playing at the highest level, which is why such a fuss was made about the fact Ryan Giggs was still playing in the Premier League when he was 40, something he put down to yoga.

But football has changed beyond all recognition from the days when

Matthews was playing. The high tempo and physical pressures on players' bodies mean we're unlikely to see Lionel Messi or Ronaldo playing Champions League football when they're 40, never mind 50. It's also fair to say that if Stanley Matthews was around today he wouldn't still be playing in the Premier League at that age.

Even so, there are still sportsmen and women who seem to defy the ageing process. The record-breaking AP McCoy, the only jump jockey to have ridden more than 4,000 races, is still riding at the peak of his powers in his

41st year and on the brink of a 20th

successive title. Advances in human fitness, medical science and jockey safety are all said to be contributory factors in helping them prolong their careers. Age certainly proved no barrier to the legendary Lester Piggott when he began the most improbable of sporting comebacks in 1990 on the eve of his 55th birthday. Within days, a nerveless Piggott had won the Breeders' Cup Mile in America - one of the world's most prestigious races – on Royal Academy and he continued to accumulate big race winners, only retiring shortly before

his 60th birthday. Tennis, too, has seen players written off only to triumph against the odds, like the indomitable Martina Navratilova who capped a glorious career by winning the US Open mixed

thing to do. But I'm not that smart." Email: chris.bond@ypn.co.uk
Twitter: @yorkshirepost doubles final in 2006 – at the age of 49. Then there's the boxer George

Foreman. Not long after his defeat to Muhammad Ali in the famous "Rumble in the jungle" in 1974 he retired to become a preacher. But a decade later he launched a sensational comeback and in 1994, at the age of 45, he won the heavyweight title for the second time.

And what about Jack Nicklaus? When he arrived at Augusta in 1986 for the US Masters no one gave the former champion much of a chance. The man they called "The Golden Bear" was 46 and hadn't won one of the majors in six years. But he fired an incredible final round to win and don the coveted green

jacket. "I'm not going to quit, guys," Nicklaus told reporters after his momentous win. "Maybe I should. Maybe I should say goodbye. Maybe that'd be the smart



WING WIZARD: Stanley Matthews laces up his boots for what would be his final match at the age of 50.