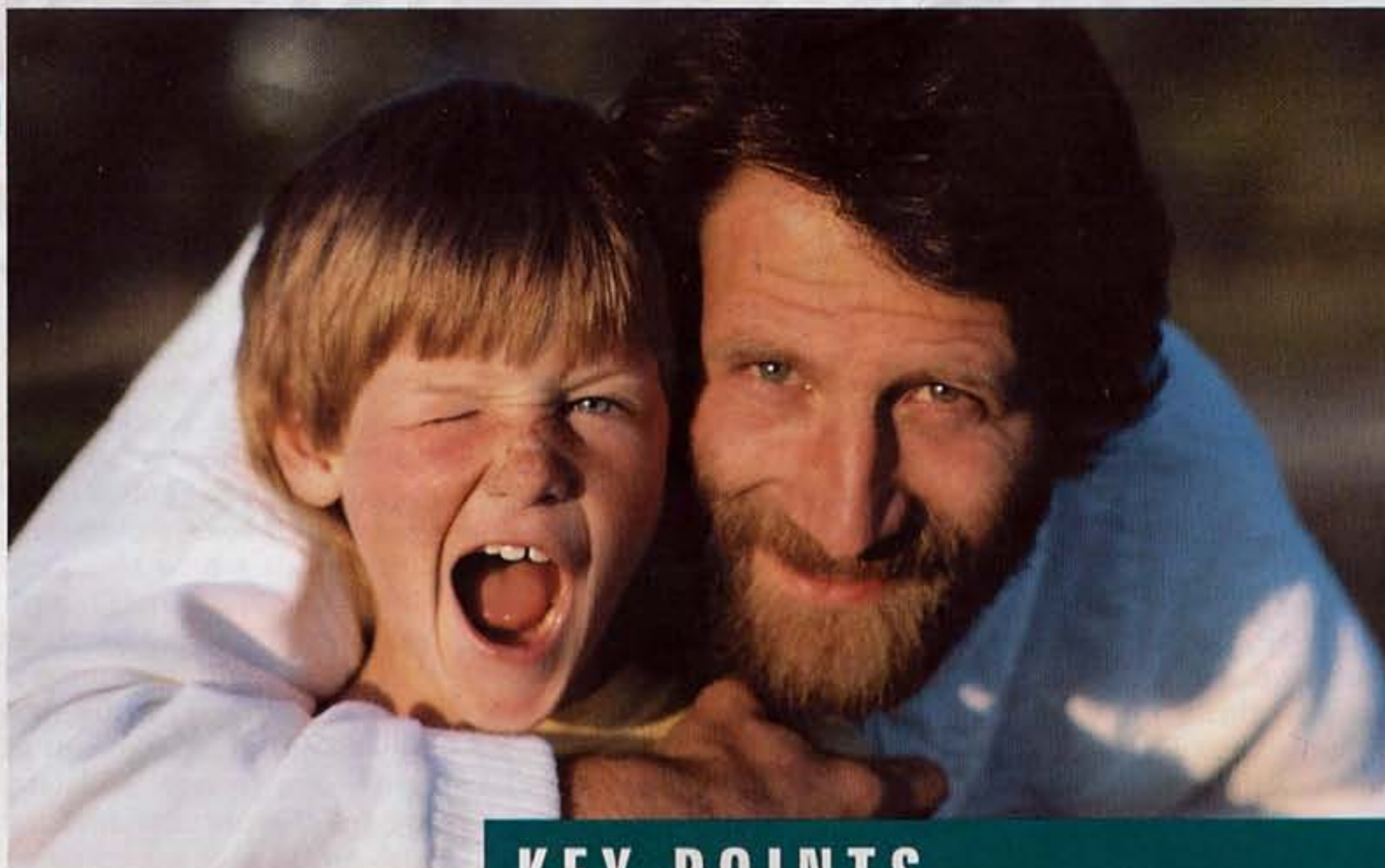


IN THE PUBLIC DOMAIN

DNA testing & pharmacy



KEY POINTS

- A DNA paternity test checks the identity of a child's father
- There are two types of paternity test – 'peace of mind' and 'court approved'
- Roughly 70 per cent of purchasers are male
- It has been suggested that up to five per cent of people in the UK may have a different father to the one they recognise

DNA paternity testing kits have recently become available for sale over the counter in some pharmacies. Other types of OTC DNA tests could soon follow. With all the controversy and ethical questions that these tests raise, Charlotte Rigby asks: are they a good fit for community pharmacy?

A DNA paternity test checks the identity of a child's father by examining the genetic markers in samples of DNA (usually taken from cheek swabs) from the child and the alleged biological father. The same technology can be used to verify the biological relationship between a mother and child or between alleged siblings. Laboratory testing can provide results that are more than 99.9 per cent accurate.

DNA paternity tests are not available on the NHS. Even if a court requests the test, individuals will have to pay for one unless they are eligible for Government funding towards legal fees. The supply of these tests is currently unregulated but suppliers must comply with the Human Tissue Act 2004, which requires that DNA samples be taken with consent.

Suppliers are also expected to comply with the Government's Code of Practice and Guidance on Genetic Paternity Testing Services, which aims to ensure that DNA tests are carried out in the best interests of children, with informed consent from all parties and that results are private and confidential.

PUBLIC DEMAND

In 2003, a report by BBC Five Live suggested that up to five per cent of people in the UK could have a different father to the one they think they have, indicating that there could be a big market for DNA paternity testing kits. The kits are readily available over

the counter in the US and have been on sale online in the UK since 2007.

In November 2009, DNA paternity testing kits from International Biosciences went on sale over the counter at the Clockwork Pharmacy group of pharmacies in London. In March 2010, the manufacturer obtained a listing for its kit with the NPA.

Demand for the kits has so far proved high, with Clockwork Pharmacy owner Prashant Patel reporting the sale of over 50 kits within the first three months.

International Biosciences is not surprised by the success. "There is a strong appetite in all sections of society to know and understand more about their DNA," says chief executive, Ian Meekins. "There is no question that consumers are becoming increasingly switched on to the DNA phenomenon, their associated personal and family history and wellbeing. The pharmacy sector is the logical retail outlet for this."

The kits are not cheap – retailing at £30 with an additional laboratory processing fee of £119 – but Patel insists that his customers have not been deterred by the price. "When someone decides to carry out a DNA test, the money is not important because the results are just something that they need to know," he says. "The test is good value for money when you compare it to the time, effort and money put into raising a child."

CONSENT ISSUES

Like other providers of DNA paternity testing, International Biosciences offers two types of paternity test: 'peace of mind' and 'court approved'.

For the latter, samples from all three parties involved – the child, the mother and the putative father – are required and must be taken by a healthcare professional and sent directly to the laboratory.

However it is possible to carry out a 'peace of mind' test with samples from just the putative father and the child, often referred to as 'motherless' testing.

"DNA paternity tests are not available on the NHS"

All those being tested must by law provide their written consent. If the child is under 16 years of age, then a person with parental responsibility must consent on their behalf, according to the Code of Practice and Guidance on Genetic Paternity Testing Services. This is usually the mother, but it can be the father if he has 'care and control' of the child, or a legal guardian.

Some experts, including director of Genetic Alliance UK, Alistair Kent, are concerned that it is too easy for putative fathers to take DNA samples from children without the knowledge or consent of the mother. "In theory, all parties are required

to give their consent. In practice, it is possible to get around this," he says.

Kent believes that if pharmacies are going to supply tests, it should be a requirement for the mother and father to sign the consent forms under the supervision of the pharmacist acting as witness.

BEST INTERESTS

According to Patel, roughly 70 per cent of purchasers are male and 30 per cent are female. Men and women may have different motivations for purchasing kits.

While men may wish to settle suspicions of infidelity, women may wish to prove their innocence or confirm who the father of their child is. Either way, Patel insists that the tests are not controversial because people "have the right to know the truth".

Kent disagrees. "Getting a paternity test is not something you do out of curiosity. It usually takes place in troubled relationships and is not usually done in the interests of the child who is the innocent party." He argues that 'motherless' testing "increases the chances of paternity being used as a weapon and is detrimental to the welfare of the child".

The first principle of the Code of Practice is that the best interests of the child should be taken into account when commissioning paternity tests. It is easy to see how the results could impact on a child's sense of identity and potentially damage their relationship with their putative father, mother and siblings. Yet the Code states that it is usually in the best interests of a child to know who their biological father is.

NO COMPLAINTS

The Code states that those consenting to testing must be given an opportunity to consider the possible implications that knowledge of the test results will bring. Although International Biosciences offers counselling to its customers, it is difficult to see how a pharmacist could ensure that a customer is aware of all the ramifications of requesting a test. Nevertheless, Patel says he's had no complaints from customers unhappy that they had not obtained the results they were hoping for.

Since the tests are available and unregulated, he argues that pharmacy is the best setting in which to provide them. While there is no follow-up after sale, staff are trained to explain what the test involves. "I think it is better that these tests are sold by pharmacists who are professional, responsible individuals, rather than over the internet or in supermarkets or petrol stations," he says. ●