

TESTING TREATMENTS

Chapter 5, 5.1.4 TESTING TREATMENTS

Mother's

Low-tech approaches can have dramatic effects too. Young children sometimes place small objects – plastic toys or beads, for example – in their nose. But they often have trouble blowing their nose to expel such foreign bodies. The ‘mother’s kiss’ technique for dislodging the offending object – involving a parent closing the unblocked nostril while blowing into the child’s mouth – is simplicity itself, as well as being very effective.^{2, 6}

kiss

A new treatment for strawberry birthmarks
Treatments with dramatic effects are occasionally discovered by accident. Take the example of a condition that occurs in infants called a haemangioma, which, like portwine stains, is also due to malformation of immature blood vessels. In haemangiomas, small blood vessels come together to form a lump. Haemangiomas mostly affect the skin, usually on the head and neck, but they can occur in organs inside the body such as the liver. The skin lesions, which are often called strawberry marks because of their bright red, raised appearance, are not usually visible at birth but generally appear in the first week or so of life. They tend to grow rapidly in the first three months and then the growth rate slows. In most cases they disappear of their own accord by the time the child is five years old, leaving behind a faint pink mark or some loose skin.

However, some haemangiomas need treatment because of their position – for example, they may cover an eye or block the nose. Or treatment may be necessary because of other complications. Ulcerated haemangiomas may become infected, or heart failure may develop in patients with very large lesions because the heart has to pump so much blood through blood vessels in the lump.

Until recently, steroids were the first-choice medical treatment for problematic haemangiomas. Then in 2008, some doctors had dramatic results with another treatment, which they came across quite by chance. They were using steroids to treat a baby with a huge haemangioma that almost swallowed up the face and right eye. Despite this treatment, however, the baby developed heart failure. So, to treat the heart failure they started the baby on a standard drug for this condition called propranolol. To their astonishment, the appearance of the haemangioma started

STEPWISE PROGRESS DOESN'T HIT THE HEADLINES

'Science itself works very badly as a news story: it is by its very nature a subject for the "features" section, because it does not generally move ahead by sudden, epoch-making breakthroughs. It moves ahead by gradually emergent themes and theories, supported by a raft of evidence from a number of different disciplines on a number of different explanatory levels. Yet the media remain obsessed with "new breakthroughs".'

Goldacre B. *Bad Science*. London: Fourth Estate, 2008, p219.

to improve within 24 hours, and within a week the tumour had shrunk sufficiently for the baby to open an eyelid. After six months of treatment the haemangioma had melted away. Over the following year the doctors went on to use propranolol in a dozen children with similar success. These impressive results have been replicated by other doctors in small numbers of children and propranolol is now being studied further in larger numbers of infants.^{7,8}

MODERATE TREATMENT EFFECTS: USUAL AND NOT SO OBVIOUS

Most treatments do not have dramatic effects and fair tests are needed to assess them. And sometimes a treatment may have a dramatic effect in some circumstances but not in others.

Although vitamin B12 is undoubtedly effective for pernicious anaemia (see above), dispute continues to this day about whether patients need quarterly or more frequent treatment. That question will only be answered by carefully controlled tests comparing the options. Moreover, whereas the pain relief with hip replacements is dramatic, the relative merits of different types of artificial hip joints are far more subtle, but may nevertheless be important – some may wear out faster than others for example. With laser