

unknown until suddenly the patient sat up and, pointing at the mouse, shouted triumphantly, 'There it is!' Order having been restored by catching the mouse, the surgeon advanced once more towards the operating table. In doing so he struck his head violently against the rim of the operating lamp, not noticing that it had been placed somewhat lower than usual. He collapsed on to the floor, briefly concussed, and the patient sat up again, gazing in bewilderment at the dead mouse and the unconscious surgeon!"

Postoperative risks

An orthopaedic surgeon cannot afford to drop his guard even when the operation is over. There are numerous reports of buckets of plaster and traction weights crushing a surgeon's foot. Turning away from the operating table, one unfortunate surgeon stumbled on green towels that had been discarded on the floor and ruptured his Achilles tendon. Another surgeon tripped on the stairs and sustained a pertrochanteric fracture.

Even the home does not provide sanctuary. Some keen do it yourself orthopaedic surgeons continue to injure themselves. Many a hand has been skewered with a screwdriver or sliced with a Stanley knife. One surgeon sustained a mallet finger while rescuing his "psychopathic" dog from a fight. Another orthopaedic surgeon even found that getting away from it all did not ensure safety. While sailing in the West Indies his wife landed a barracuda over 1 m long. He was still trying to kill it with a blunt instrument when it bit him on the



finger, severing the extensor tendon of his right ring finger.

We conclude that there are three ways for orthopaedic surgeons to avoid injury. Firstly, they could follow the example of one surgeon, who after repeated minor injuries bought himself a pair of glasses. Secondly, they could act on the advice of an eminent spinal surgeon from Stoke on Trent, who suggests that they get their assistant to do the dangerous work. Finally, if all else fails, they could become anaesthetists: there are no reports of injuries to doctors while doing *The Times* crossword puzzle.

1 Brenkel IJ, Pearce M, Gregg PJ. A cracking complication of hemiarthroplasty of the hip. *Br Med J* 1986;293:1648.

Are orthopaedic surgeons gorillas?

D S Barrett

Royal Berkshire Hospital,
Reading, Berkshire
RG1 5AN
D S Barrett, FRCS, registrar in
orthopaedic surgery

Long held traditions die hard in the specialty of general surgery, and the image of the orthopaedic surgeon as a man of enormous build and great strength, if perhaps a little slow, is still popular. I assessed whether what was once an undoubted fact is true today.

Methods and results

Hand size is closely related to body size and bulk.¹ I established the size of gloves worn by a sample of orthopaedic and general surgeons by sending questionnaires to the theatre sisters of the departments of orthopaedics and general surgery in 30 hospitals selected at random throughout the United Kingdom. Twenty two of the 30 sisters (74%) responded, giving the glove sizes of 166 general surgeons and 150

orthopaedic surgeons. When the surgeons wore two pairs of gloves only the size of the inner glove was used.

The mean size of glove worn by orthopaedic surgeons was 7.6 (SD 0.4) while the mean size of gloves worn by general surgeons was 7.4 (0.4). The difference between the two groups was highly significant ($p < 0.001$, Student's *t* test). The range in size for both groups was 8.5 to 6.0. Standard techniques for assessing height from hand size² showed that the orthopaedic surgeons were slightly taller than their general surgical colleagues (by 2.3 cm).

Comment

This method of measuring hand size has many disadvantages as the tightness of the glove varies among surgeons and the glove selected does not show the relative proportions of the hand, which represent a more sensitive anthropological indicator. In addition, glove size is not a continuous variable as it increases in fixed half sizes, and this limits the accuracy of the assessment. With a sufficiently large sample, however, this method gives an overview of the difference in hand size between the two groups.



CHURCHILL LIVINGSTONE, EDINBURGH

Reduction in progress. (From the Life of Hugh Owen Thomas by David Le Vay)

Discussion

Before the advent of modern orthopaedics fractures and dislocations were the domain of the bonesetter. In the absence of anaesthetics closed reductions required considerable strength to overcome muscle spasm, and thus bonesetters were often large men, traditionally blacksmiths and farmers. Hugh Owen Thomas, though small himself, came from four generations of farmer bonesetters noted for their size. In 1887 he recorded the need for "ten large and heavy men (carters) to reduce the shoulder dislocation."³ Other eminent orthopaedic surgeons of the time were large. Abraham Colles was described as a man of above middle size⁴ and Robert Jones as a "bulky figure."⁵

The image of the orthopaedic surgeon as a man of massive bulk and strength with a low hairline who

communicates with his colleagues in a series of grunts while proceeding along the hospital corridor in a succession of ape like bounds is unfair. It is a complete falsehood that as they walk their fingers trail in the dust. These views of orthopaedic surgeons derive from the early bonesetters with their lowly origins as perceived by an increasingly jealous medical profession. At the time of Evan Thomas, the father of Hugh Owen Thomas, medically unqualified bonesetters were making deep inroads with their success into a more organised medical profession. In an effort to arrest the public awe with which these men were regarded a series of libellous letters appeared in newspapers denigrating their skill and ability. In Liverpool doctors brought several trumped up cases of malpractice against Evan Thomas which were thrown out by an increasingly irritated judiciary.¹

Interestingly, despite the change in orthopaedics, which now includes such delicate work as nerve and tendon grafting, orthopaedic surgeons are still larger than their counterparts in general surgery. Perhaps orthopaedics is still perceived as a macho specialty among those who pale at the thought of physically manipulating limbs and joints, so that only the largest trainees are encouraged to apply. This image is of course hurtful to orthopaedic surgeons, who under their larger exterior are deeply sensitive people who are kind to animals and help old ladies to cross the street. After all, orthopaedic surgeons operate not in a pool of pus and bowel contents as do general surgeons but in ultraclean laminar flow theatres with aesthetically pleasing shiny joint replacements.

Orthopaedic surgeons are indeed large, but, as Sir David Attenborough has pointed out, gorillas are among the most civilised and integrated species about.⁵

1 Krogman W.M. *The human skeleton in forensic medicine*. Springfield, Illinois: Charles C Thomas, 1978.

2 Saxena SK. A study of correlations and estimation of stature from hand length, hand breadth and sole length. *Anthropol Anz* 1984;42:271-6.

3 Le Vay D. *The life of Hugh Owen Thomas*. London: Livingstone, 1952.

4 Fallon M. *Abraham Colles*. London: Heineman, 1972.

5 Attenborough D. *Life on earth*. London: Collins, 1979.

Anaphylactic reaction after eating a mango

John Miell, Mark Papouchado,
Andrew J Marshall

Royal Naval Hospital,
Plymouth, Devon PL1 3JY
John Miell, MB, registrar in
medicine

Plymouth General
Hospital, Plymouth, Devon
PL4 8NN

Mark Papouchado, MRCP,
locum senior registrar in
medicine
Andrew J Marshall, FRCP,
consultant in cardiology

Correspondence and
requests for reprints to: Dr
Marshall.

We describe a case of immediate hypersensitivity after ingestion of a mango that presented as an acute anaphylactic type reaction. Few such cases have been described, and none have been investigated in detail.

Case report

A 32 year old fruiterer presented with periorbital oedema, facial erythema, widespread urticaria, and dyspnoea 20 minutes after eating a fresh mango. Despite his profession this was the first time he had eaten a mango, and he had handled mangoes only once before. He had a history of atopy: he had had eczema and hay fever as a child, had been asthmatic since the age of 2 (with allergies to house dust mite and animal fur), and was allergic to penicillin. His brother and his eldest child were also asthmatic.

On examination he had considerable periorbital oedema, a swollen tongue, an urticarial rash over the arms and trunk, and tachypnoea. His pulse was 100 beats/minute, and his blood pressure was

104/72 mm Hg. Minor expiratory wheezes were heard in his chest. His abdomen and central nervous system were normal. Anaphylaxis was diagnosed; he was treated with intravenous hydrocortisone and chlorpheniramine maleate and made an uneventful recovery over the next few hours.

Prick testing with mango juice, melon juice (which he had had before without problems), and physiological saline (as a control) was performed 48 hours after presentation. The juice was extracted by syringe from fresh fruit. Mango juice (0.1 ml), melon juice (0.1 ml), mango juice diluted one in 10 in physiological saline, and a saline control were placed on the volar aspect of his forearm and pricked into the skin, taking care to avoid bleeding. The four sites were read after 20 minutes. Ten volunteer control subjects without a history of atopy and six with a history of asthma or eczema, or both, were tested in the same way to exclude a false positive reaction due to release of histamine.¹ Total IgE titre in the patient was measured by radioimmunoassay with paper discs as the solid phase and was 0.33 IU/l (normal range 0.02-0.10 IU/l). Specific IgE antibodies to mango were measured by radioallergosorbent testing. The results showed scores of 0 for mango, 2 for timothy grass, and 4 for house dust mite. The table shows the result of prick testing the patient at the four sites at 20 minutes. The mango juice produced a wheal with surrounding erythema and localised itching within five minutes. None of the controls reacted.