

## Hippocrates

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### **The case of the puzzled mother-in-law**

Hippocrates' mother-in-law has not featured in these pages before; it is the highest time, though she is a healthy ninety-two with no more pronounced ailment than a little stiffness of the joints. But the general infirmity of great age inevitably brings her into contact, from time to time, with the medical profession. The other day she had need of a medical affidavit to justify her receiving some support from a day care service, and since an unfamiliar environment can initially be confusing for her, one went along dutifully with her to the district physician to explain her need.

Many years ago, Joyce Grenfell and Stephen Potter produced a gem of a programme for the BBC entitled "How to talk to children". Is there not, somewhere, a guide for our colleagues on how to talk to the very old? I do not recall that, for the first few minutes of the interview, the district physician across the table even spoke to her, and he barely had a word for your correspondent; he was much too occupied in reading aloud from the record on his computer screen, interposing assurances that he was entirely aware of the case, and casting doubt on the possibility that the good lady had any hope of receiving funding for her day care if she was in fact perfectly well. At length, with the affidavit already rolling out of the printer, he did address her.

"Maria" he said, "I have to find out how well orientated you are. What is the date today?"

She took up her diary and began to reply that it was the twenty first of July, but he wagged a reproachful finger at her. "You must not look in your diary" he said. "I want to know if you recall the date yourself. Where are we, now?"

She began to shake her head. He interrupted her attempt to formulate an answer. "You don't know, do you? Who am I?"

"You..." He turned back to the printer to extract the affidavit, not perhaps entirely noticing when she murmured: "... are a doctor".

"Good, good" he went on absently. "Now if you expect the insurance to pay for this day care, you had better go out and break a hip. That's the only way."

She stared at him uncomprehendingly. "You have some symptoms, I suppose?" he enquired, still staring at the printer.

Marie began to point indecisively at her ribs and her shoulder, but he was already standing up, handing over the affidavit to your correspondent. "I know all that" he explained. "She told me last year." He turned to her for the last time to hand over her walking stick and to usher her towards the door... "Well, come back if you have any problems" he said. One still wonders whether she should be advised to follow up the invitation.

### **Immunological effects of blood cell transfusion**

One cannot repeat too often the point that blood transfusion is a form of transplantation, and that it can bring with it the risks of the latter. It is very well known that if large amounts of blood cells

are transfused, toxic effects can ensue; the chance of infectious complications is also well recognized and particularly since the arrival of the HIV epidemic a great deal has been done to reduce these risks, for example, by donor counselling and blood product controls. What does not always seem to be appreciated is that immunological complications can also occur and that they are actually the rule rather than the exception, though they are not often clinically manifest and only rarely serious.

Haemolytic reactions to transfusion of red cells can occur early or late; much can be done to counter them by careful and sensitive antibody screening and the maintenance of a thorough computerized record of antibodies detected in the past. Transfusion of leucocytes can cause a range of problems. Human leucocyte antigen present on the cell membrane can induce the formation of antibodies which can lead to the rejection of transplanted organs [1] and to the recipient's becoming unreceptive to subsequent thrombocyte transfusions; administration of thrombocytes from a single donor has long been found to reduce the risk, but the preferred approach today is to give blood products from which most of the leucocytes have been removed [2], or in which the antigen-carrying cells have been inactivated [3]. A much under-estimated sequel is the suppression of the recipient's immune reactivity, perhaps with a life-long reduction in thrombocyte levels. This may actually be helpful in improving tolerance to organ transplants, and it seems likely that such tolerance can be induced by using donors which are matched for DR-antigen or HLA-haplotype [4].

Graft versus host disease is a well-recognized problem after allogenic marrow transplantation, but it can also occur in a more serious form after leucocyte transfusion; fortunately the risk of GvHD can be virtually eliminated by gamma-irradiation of blood products intended for transfusion [5].

Not all of this knowledge is recent – much of it actually dates from the eighties – but it seems that it has not been consistently processed into national transfusion guidelines, nor has it been adopted in international consensus documents. Some risks are apparently still being taken which are to a large extent avoidable.

## References

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- [2] A. Brand, F.H.J. Claas, P.J. Voogt et al., Alloimmunization after leucocyte-depleted multiple random donor platelet transfusions, *Vox Sang* **54** (1988), 160–166.
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- [4] D. Middleton, J. Martin, J. Douglas et al., Transfusion of one HLA-DR antigen-matched blood to potential recipients of a renal allograft, *Transplantation* **58** (1994), 845–848.
- [5] K.C. Anderson, Clinical indications for blood component irradiation, in: *Irradiation of Blood Components*, M.L. Baldwin and L.C. Jeffries, eds, American Association of Blood Banks, Bethesda, MD, 1992, pp. 31–50.

## The case of the blunt needles

Sometimes, a conclusion emerging from laborious research seems so self-evident as to constitute mere common sense. That could be one's first reaction to the work of Hartley and his colleagues [1] who concluded from their study in patients undergoing colorectal surgery that the risk of perforating the surgeon's gloves was much greater if sharp ("cutting") needles were used to close the abdominal incision than if blunt needles were employed. To be concrete: in only of 3 of 46 operations using a blunt needle was a glove pierced, whereas this happened in 14 of 39 operations where closure involved

using a sharp needle. The truth of the matter, of course, is that this sort of finding can be immensely valuable to breaking a bad habit. It seems to have been generally assumed that good needles are always sharp needles and bad needles are blunt; surgeons and theatre sisters have encouraged one another in that belief. In fact, in this study, the blunt needles proved as effective for their particular purpose as the cutting needles, while being substantially safer. As important is a secondary finding by the Hartley group: the surgeons involved usually guided the needle by inserting a finger of the non-dominant hand into the abdominal cavity, and it was here that punctures usually occurred. No doubt rightly, the authors call for a “no touch” technique to be used instead.

## Reference

- [1] J.E. Hartley, S. Ahmed, R. Milkins et al., Randomized trial of blunt-tipped versus cutting needles to reduce glove puncture during mass closure of the abdomen, *Br. J. Surg.* **83** (1996), 1156–1157.

## Evidence-based medicine

Some things are new in medicine; a lot more are old wine in new jugs. What are we to think of evidence-based medicine? In fact it has been with us for an awfully long time, but under other labels. Any physician worth his salt has tried to practice medicine in the light of evidence derived from experimentation on the one hand and field experience (his own, or that of his fellows) on the other. In some areas, notably pharmacology, the establishment of national approval procedures a generation ago required that evidence be systematically sought, collected and analyzed. Guideline committees attached to national medical associations also do sovereign work. As Warren McIsaac, an Ontario-based physician and member of the Institute of Clinical Evaluative Sciences (ICES) reminds us, however, a lot of the evidence needed to practice medicine logically has still simply not been accessible to the people who need it [1]. Sophisticated clinical studies have appeared in equally sophisticated journals with small circulations; field experience has often been poorly documented; and the two have rarely been brought together. ICES is one of the bodies which seeks to put that right. Not surprisingly, its studies tend to crystallize out in the familiar form of guidelines, available both in a newsletter and on a worldwide website [2]. Those which have appeared to date include texts on the appropriate use of angiotensin-converting enzyme inhibitors in heart failure, prostate-specific antigen testing, and the use of antibiotics to treat patients with a sore throat. The last is particularly relevant to safety and risk; a great many sore throats not attributable to group A streptococci are nevertheless treated with antibiotics, and the result can only be a rise in resistance.

## References

- [1] M. O'Reilly, Evidence-based medicine designed to save physicians time, energy, FP's told, *Can. Med. Ass. J.* **156** (1967), 1457–1458.  
[2] [www.ices.on.ca](http://www.ices.on.ca).

## Patients' rights

For the sake of good order: even Hippocrates admits that there are areas of health care in which everything seems to be moving in the right direction. Patients' rights are one such issue. The

“Declaration on the promotion of patients’ rights in Europe” which was drawn up by the WHO Regional Office for Europe was adopted at a special consultation in Amsterdam in 1994. At another European level, a draft “Convention for the protection of human rights and dignity of the human being with regard to the application of medicine and biology” was prepared for the European Health Committee of the Council of Europe; if accepted, signed and ratified by member states it will acquire the status of a binding international convention, to which even countries outside the Council can accede.

One development which is still emerging from the corridors relates to certain rights of the young child, including the right to proper food, with breast feeding provided wherever feasible; UNICEF and a range of voluntary organizations are involved. More news is to be expected by the end of 1997.