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References

- ¹ Pagenelli R, Levinsky RJ, Brostoff J, Wraith DG. Immune complexes containing food proteins in normal and atopic subjects after oral challenge and effect of sodium chromoglycate on antigen absorbtion. *Lancet* 1979;i:1270-2.
- ² Brostoff J, Carini C, Wraith DG, Johns P. Production of IgE complexes by allergen challenge in atopic patients and the effect of sodium chromoglycate. *Lancet* 1979;i:1268-70.
- ³ Cunningham-Rundles C, Brandeis WE, Good RA, Day NK. Milk precipitins circulating immune complexes and IgA deficiency. Proc Natl Acad Sci USA 1978;75:3387-9.
- ⁴ Cunningham-Rundles C, Brandeis WE, Safai B, O'Reilly R, Day NK, Good RA. Selective IgA deficiency and circulating immune complexes containing bovine proteins in a child with chronic graft versus host disease. Am J Med 1979;67:883-90.
- ⁵ Ritchie DM, Boyle JA, McInnes JM, et al. Clinical studies with an articular index for the assessment of joint tenderness in patients with rheumatoid arthritis. Q J Med 1968;37:393-406.
 ⁶ Zubler RH, Lange G, Lambert PH, Miescher PA. Detection of immune
- ⁶ Zubler RH, Lange G, Lambert PH, Miescher PA. Detection of immune complexes in unheated sera by a modified I¹²⁵ Clq binding test. *J Immunol* 1976;116:232-5.

- ⁷ Elkon KB, Sewell JR, Ryan PFJ, Hughes GRV. Splenic function in non-renal systemic lupus erythematosus. Am 7 Med 1980;69:80-91.
- 8 Wide L, Uppsala MD, Bennich H, Johansson SGO. Diagnosis of allergy by an in vitro test for allergen antibodies. *Lancet* 1967;ii:1105-7.
- Lessoff MB, Wraith DG, Merrett TG, Merrett J, Buisseret PD. Food allergy and intolerance in 100 patients—local and systemic effects. Q J Med 1980;195:259-71.
- ¹⁰ Kraehenbuhl JP, Campiche MA. Early stages of intestinal absorption of specific antibodies in the new-born. An ultrastructural cytochemical and immunological study in the pig, rat and rabbit. J Cell Biol 1969; 42:345-65.
- Morris IG. Gamma globulin absorbtion in the newborn. In: Cope CF, ed. Handbook of physiology of the alimentary canal. Vol 2. Washington DC: American Physiological Society, 1968:1491-512.
- ¹² Matthew DJ, Taylor B, Norman AP, Turner MW, Soothill JF. Prevention of eczema. *Lancet* 1977;i:321-4.
- ¹³ Korenblat RE, Rothberg RM, Minden P, et al. Immune responses of human adults after oral and parenteral exposure to bovine serum albumin. J Allergy 1968;41:226-35.
- ¹⁴ Walker WA, Isselbacher KJ. Uptake and transport of macromolecules by the intestine. Possible role in clinical disorders. *Progress in Gastro*enterology 1974;64:531-50.
- Atherton DJ, Sewell M, Soothill JF, Wells RS, Chilvers CED. A double blind controlled crossover trial of an antigen avoidance diet in atopic eczema. Lancet 1978;i:401-3.
- ¹⁶ Elkon KB, Lanham JG, Dash AC, Hughes GRV. The effect of a protein meal on three fluid-phase assays for circulating immune complexes. *Clin Exp Immunol* (in press).

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Personal Paper

The slow miracle*

PHILIP KENT

Time wore on. With relentless stealth the crushing constriction of this grim sickness increased. Weaker and weaker, more and more pain, thinner and thinner. Limbs like matchsticks and a neck scrawny as a turkey's. What is to happen? I have a mounting sense of terrible foreboding. Never before have I felt the like, for with this physical withering has come a cruel sharpening of the mind's edge and I seem to respond and alert to everything with increasing sensitivity.

I am walking through the valley of the shadow.

Nothing helps. My knowledge of treatment is now very extensive. You name it—I've tried it, and I might as well have swallowed a packet of dolly mixtures except that the latter would not have produced the frightening reactions of the former! Perhaps plasmaphoresis? But no, I am not suitable for this. So there's just one thing left—immunosuppressors. Secretly I'd always vowed to avoid these, but here I was taking azathioprine and after a long spin interrupted by pneumonia, which might well not have happened had I not been suppressed, it must be abandoned, unhelpful and so unsafe.

*A sequel to "A very personal view" (14 October 1978, pp 1067-8) in which the impact of the onset of acute rheumatoid arthritis was described.

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"If you really want a miracle," said my loyal friend, "you must try cyclophosphamide. The only miracles I've ever seen in rampant rheumatoid arthritis have followed its use."

But do I believe in miracles? Why, yes, of course. Something happening for which there is no known or understood explanation is miraculous. I believe the miraculous is commonplace and everyday, provided we do not fall into the mistake of expecting every miracle to be as rapid and dramatic as a conjuring trick.

The blind is touched and sees. The paralysed man walks and the dead is suddenly alive again. All miracles. Speed miracles. But what of the pansy seed? Just pick one up between finger and thumb. You cannot? No, of course it's too small. But all we need to do with this tiny thing is give it the support and warmth of moist earth and presently we will be rewarded with a flower the texture of whose petals surpasses any fabric, whose colouring defies artistic imitation, and whose scent has never been trapped in a bottle, and the fading flower bears behind it the promise of eternal life locked in a seed pod. This to me is miraculous. We have not the remotest idea or understanding of the amazing potential spark of life carried in that tiny common seed. Blake wrote:

"To see a World in a Grain of Sand And a Heaven in a Wild Flower, Hold Infinity in the palm of your hand And Eternity in an hour."

Carefully monitored I started taking cyclophosphamide and time ticked, and ticked, and nothing happened. Nothing bad at any rate, in itself encouraging. Give it the maximum chance. Still nothing, and then influenza, short, sharp, and unpleasant. Keep going, keep going.

Tremble of hope

I gradually realised that I was taking progressively less and less analgesic and that the intervals between intra-articular cortisone injections were lengthening. I think I was an easy record holder for number and frequency of these.

I felt the uncertain stir and tremble of hope. Blood tests stayed safe. My haemoglobin rose and then hesitantly but with slowly increasing momentum my viscosity fell, down and down. I ceased to lose weight and presently started to gain, and nodules the size of half walnuts below my elbows melted away. My injections stopped.

All this produced a strange bewilderment. That for which I had ached and prayed now seemed just possible, and yet I found myself timid and apprehensive to accept and acknowledge my enlarging fortune. But the signals were insistent, and the pressure of this internal fermentation rising up and up overtook me as surely as the magic of Rachmaninov's music in his third piano concerto rising and falling and then thrusting up in marvellous major modulation like a huge sunflower reaching up and up towards the light, stretching the yellow gold of its petals to the sun, and whirling like a giant catherine wheel, showers its golden beauty in dazzling ecstasy. So this was it, my slow miracle.

I have always puzzled at the reluctance of many to accept the miraculous, and the triumphant arrogance with which we so often acclaim our achievements, when the achievement itself should be a most humbling revelation and increasing demonstration of infinite power.

Recently man has amazed himself by travelling at speeds which to him are tremendous, and quite incomprehensible to the ordinary person, reaching out to Saturn and sending back to Earth wonderful pictures. Marvellous by our standards and measures, but surely this confirms what must have been suspected that there was even more and more and more without end or boundary. Indeed infinite.

At the other end of the scale, the smaller we study so again the more we find. Again infinite, so that in some strange circular way the greatest and the smallest meet in the infinite. I am Alpha and Omega, the beginning and the end.

I believe that the profession is very, very gently showing a readiness to consider alternatives which it has hitherto totally shunned as these did not stand tests and investigations by disciplines and methods designed to give validity to scientifically evolved theories. I suggest that if the testing criterion be the wrong one then the alternative being tested is not being tested at

I know that I have received a miracle. Of its origin I may never be certain, but I have had seemingly endless time to ponder, so that fumbling as my conclusions may be, they may possibly enable others to re-evaluate their situations.

Hand of love

I know that love has played a major part in my recovery. The steadfast love of my wife and family, the wonderful caring compassion of my friend who has treated me, the amazing support—so strong I call it love, for herein I have found lasting and valuable friendships—of those who cared and were concerned for me, especially two wonderful friends who laid their hands

Where do all these things come from? I find that for me they have one inevitable source.

When I wrote some time ago and told of the distress and loneliness of this foul affliction I had not expected to receive letters from all over the world, nor to find my comments published so widely in so many languages. Now in this Year of the

Disabled I write to encourage stricken people to seek their own slow miracles.

Twenty-two years ago a fearsome future confronted a close family friend who was a musician. The imminent terror of blindness and the need for operations on the eyes, followed by weeks of eye occlusion, confronted her.

I wrote the following which, with her permission, I reproduce. I offer it with humbleness and thanks for my own slow miracle:

"And He smiled at me and said 'Grasp hold this hand for it is here beside you and will lead you through the darkness of the time ahead. Its warmth will warm you, and from its strength will flow your strength, and from its gentle power will come your courage, for this is the hand of love, though wounded it is unharmed and strong and waits your touch to guide you to the sunlight of the morning'.'

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Medical postscript

A ST JOHN DIXON

Cyclophosphamide is used in rheumatoid arthritis when other "second line" drugs (gold injections, penicillamine, hydroxychloroquin, azathioprine) have failed and the disease is pursuing a malignant course. It is not known precisely how it works, nor can success be automatically predicted.

There are adverse effects. Hairfall may occur, but is rare in the low doses (50-100 mg a day) used in rheumatoid arthritis, particularly if the dose is built up slowly from 10 mg a day. $\stackrel{>}{\sim}$ Some suppression of the platelet count is expected, figures above $100 \times 10^{\circ}$ /l being acceptable. Sometimes the drug causes an unpleasant epigastric pain that seems to differ from dyspeptic pain. More seriously, and more often in women than in men, the drug or its metabolites, which are concentrated in the urine, may set up haemorrhagic cystitis and pyelitis, an unpleasant and potentially fatal complication. To avoid this patients must drink plenty of fluids and keep the urine dilute. Finally, the drug is thought to interfere with lymphocyte suppressor cell function, and there is a risk that this may make it easier for various cancers to appear.

Cyclophosphamide is therefore never likely to be widely used in rheumatoid arthritis. But it does give us a glimpse of the potential curability of this otherwise incurable disease and "when you need a miracle in rheumatoid arthritis, and nothing less than a miracle will do," then cyclophosphamide may provide this.

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Does smoking affect wound healing in normal subjects?

Smoking is not included in the long list of the many local and systemic factors known or suspected to affect wound healing.1 Although nicotine is a potent vasospastic agent, there is no evidence that even heavy cigarette smoking impairs the vascularity of a healthy wound. There is no doubt, however, that the healing of a laparotomy wound is undoubtedly indirectly affected by smoking. Both complete dehiscence and incisional hernia have a strong association with postoperative pulmonary complications,2 and there is a close association between the development of postoperative chest complications and smoking.3 For this reason (among others) smoking should be completely prohibited for as long as possible before a patient is submitted to routine laparotomy.

Ellis H. Wound healing. Ann R Coll Surg Engl 1977;59:382-7.
 Leaper DJ, Pollock AV, Evans M. Abdominal wound closure. Br J Surg 1977;64: 603-6.
 Laszlo G, Archer GG, Darrell JH, Dawson JM, Fletcher CM. The diagnosis and prophylaxis of pulmonary complications of surgical operation. Br J Surg 1973; 60:129-34.