We conclude, firstly, that the management of women who present to accident and emergency departments requiring emergency contraception is in disarray and that experts should suggest a common approach. This would ensure consistent management throughout the United Kingdom based on published data reflecting the safety of such drug treatment. Secondly, any protocol should be realistic and should spare women the inconvenience and often the embarrassment of seeking such emergency care; it should also include recommendations concerning follow up.

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- 1 Smith BH, Gurney EM, Aboulela L, Templeton A. Emergency contraception: a survey of women's knowledge and attitudes. *Br J Obstet Gynaecol* 1996;103:1109-16.
- 2 Smith LF, Whitfield MJ. Women's knowledge of taking oral contraceptive pills correctly and of emergency contraception: effect of providing information leaflets in general practice. *Br J Gen Pract* 1995;45:409-14.
- 3 Cayley J. Emergency contraception. *BMJ* 1995;311:762-3.
- 4 Drife JO. Deregulating emergency contraception. *BMJ* 1993;307:695-6.

Dominant gene probably caused some of defects ascribed to thalidomide

EDITOR—The journal *Teratogenesis, Carcinogenesis and Mutagenesis* published a highly controversial paper by Huang and McBride purporting to show experimental evidence which might "explain" second generation defects in the offspring of people accepted as having been damaged by thalidomide.¹ Bower asks why the journal should publish this paper alongside a devastating critique by Neubert, a member of the journal's editorial board, saying that "the paper ... contains so many inadequacies that it is impossible to draw any conclusions."²

I wish to put the record straight. Dr McBride's work was not "presented to the European Toxicology Society in Dublin five years ago." According to Professor Neubert's paper, Dr McBride's data were presented in Dublin at the time of the European Teratology Society's meeting but outside the regular programme and were therefore not included in the abstracts of that meeting. The data were "released by the authors (without knowledge of the organisers) to the press as highlight of this meeting." There is therefore no valid experimental evidence to support the "second generation" hypothesis.

The second strand to the media story is that a small number of people who were accepted as having been damaged by thalidomide have become parents of similarly affected children. The only reasonable conclusion is that a dominant gene is responsible in both generations. When decisions were being made in the 1960s and 1970s about who had and who had not been damaged by thalidomide, a number of diffi-

cult cases were given the benefit of the doubt (that is, attributed to thalidomide), and some decisions were made by doctors who lacked the necessary experience. It was inevitable that some of these people had not, in fact, been damaged by thalidomide.

So long as the media are prepared to perpetuate the myth of second generation defects due to thalidomide, medical scientists must spend time refuting it. The myth raises hopes of additional compensation for the few but, more importantly, it raises fears among people with defects due to thalidomide that their future children are at serious risk of being born with similar defects. Even those who have completed their families and whose children are healthy may fear third generation defects in their grandchildren.

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- 1 Huang PH, McBride WG. Interaction of [glutermide-2-14C]-thalidomide with rat embryonic DNA in vivo. *Teratogenesis, Carcinogenesis and Mutagenesis* 1997;17(1):1-5.
- 2 Neubert D. Never-ending tales of the mode of the teratogenic action of thalidomide [comment]. *Teratogenesis, Carcinogenesis and Mutagenesis* 1997;17(1):i-ii.
- 3 Bower H. Publish and be damned? *BMJ* 1997;315:554. (30 August.)

Allergic contact dermatitis to oestradiol patches might have been expected

EDITOR—In their comparison of two transdermal oestradiol patches Ross et al conclude that matrix patches of oestradiol irritate the skin less than reservoir patches.¹ They do not, however, distinguish between irritant and allergic skin reactions.

Allergic contact dermatitis is specific to a particular agent and has been reported as due to various components of the oestradiol patch system, including the active ingredient itself,² the adhesive,³ ethanol,⁴ and hydroxypropylcellulose.⁵ These reactions require sensitisation and occur only in genetically determined individuals capable of being sensitised to a given antigen. They tend to spread away from the contact site, consist of papules and vesicles, and increase in severity in the 48 hours after the patch is removed.

In contrast, irritant or non-immunological reactions are non-specific and do not require sensitisation. Responses to irritants occur in all members of the population, but susceptibility varies. Irritant reactions to transdermal delivery systems are more common than allergic reactions. They are due to the adhesive and frictional effects of the patch and consist mainly of erythema. The occlusive nature of the patch may also cause mechanical plugging of the follicular and sweat gland openings, resulting in folliculitis and miliaria rubra. These are usually localised to the site of contact and resolve quickly after removal of the patch.

Most of the women in Ross et al's study (70 of 82) had previously stopped using a reservoir patch because of a cutaneous reaction. If these were allergic reactions then most of the study population was

already sensitised to a component of the reservoir patch. It is therefore not unexpected that substitution with a matrix patch (with different components except for the active oestrogen ingredient) and avoidance of the allergen resulted in fewer cutaneous reactions.

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- 1 Ross D, Rees M, Godfree V, Cooper A, Hart D, Kingsland C, et al. Randomised crossover comparison of skin irritation with two transdermal oestradiol patches. *BMJ* 1997;315:288. (2 August.)
- 2 Carmichael A, Foulds IS. Allergic contact dermatitis from oestradiol in oestrogen patches. *Contact Dermatitis* 1992;126:194-5.
- 3 McBurney EI, Noel SB, Collins JH. Contact dermatitis to transdermal estradiol system. *J Am Acad Dermatol* 1989;20:508-10.
- 4 Pecquet C, Pradaliere A, Dry J. Allergic contact dermatitis from ethanol in transdermal estradiol patch. *Contact Dermatitis* 1992;27:275-6.
- 5 Schwartz BK, Clendenning WE. Allergic contact dermatitis from hydroxypropyl cellulose in a transdermal estradiol patch. *Contact Dermatitis* 1988;18:106-7.

Potential biases were not taken into account in study of waiting times

EDITOR—Before Dowling's conclusion—that fundholding shortens waiting times—is accepted, four potential biases need to be considered.¹

Firstly, more information is required about the completeness and accuracy of the data that he analysed: only a small sample of patients' records in a single, possibly unrepresentative, general practice was checked. It would have been better to check a larger, randomly selected, sample at each of the four trusts.

Secondly, as Dowling points out, he limited the study to the 61% of patients placed on a waiting list without being given an indication of their time of admission. If this proportion differed between fundholding and non-fundholding practices a difference in waiting time could have arisen.

Thirdly, a difference in case mix (in particular, the mix of procedures) could have contributed to the observed differences in waiting times. Some attempt at risk adjustment using the variables he collected (age, sex, diagnosis) was needed and possible.

Fourthly, the results are based on the mean waiting time rather than the median. Distributions of waiting time are usually extremely skewed, and therefore the mean can give a misleading picture.

Possibly none of these potential biases will have affected the results. Nevertheless, a more cautious interpretation of the data is warranted until they have been considered.

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- 1 Dowling B. Effect of fundholding on waiting times: database study. *BMJ* 1997;315:290-2. (2 August.)