

Eusol,⁶ but there is no evidence from clinical studies to support such a response.

The experimental evidence against Eusol, however, does give grounds for concern. In dilute concentrations it kills fibroblasts, neutrophils, and endothelial cells in tissue culture.⁹⁻¹² When applied to open wounds that are healing by secondary intention Eusol delays the appearance of hydroxyproline (the amino acid marker of wound collagen content) and prolongs the acute inflammatory response.¹³ Eusol damages mature granulation tissue after a single application.¹⁴

Eusol has no role in the treatment of open wounds that are clean and healing well with no signs of invasive infection. Cellulitis, lymphangitis, and other spreading infections need systemically administered antibiotics. Although infection is generally accepted to delay healing, there is no hard evidence that delays result from superficial colonisation of open wounds by commensals or even pathogens (with the possible exception of β haemolytic streptococci and pseudomonads).^{15 16} Evidence that antiseptics, or disinfectants like Eusol, reduce superficial bacterial counts is lacking; whether this is necessary for optimal healing is doubtful anyway. All antiseptics are rapidly inactivated by contact with tissues and body fluids, so that to have any lasting effect they would need to be continuously applied, which would be impractical.¹⁷

Do we need Eusol at all? A strong case can be made for its use in debriding burns or necrotic chronic wounds (such as venous ulcers or pressure sores), particularly before split thickness skin grafting. Anecdotally, such cleaning might reduce exudate and smell, thereby facilitating day to day management. There are other ways of cleaning necrotic ulcers, using simple surgical debridement together with occlusive or semiocclusive dressings, which are now prescribable in hospital and community based practice.¹⁸⁻²⁰

If Eusol was introduced today as a topical wound cleaner it would need a fight to attain a product licence. Whether it

should retain its place in the *British National Formulary* requires proper clinical trials. In dilute solution it might safely retain its effectiveness as an antimicrobial and wound cleaner, but only clinical trials will tell. All antiseptics have a toxic effect on healing tissues, but before their use is rejected completely the doubts raised by experimental studies on toxicity need clinical confirmation.

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Taking infants' temperatures

Forget the axilla—the rectum is better

Deciding what to do when an infant seems unwell may be difficult for both parents and doctors. Parents measure sick children's temperatures to help them decide whether to give an antipyretic drug or call the doctor, while the doctor's main decision is whether to treat the child at home or to refer to hospital. Recent publicity given to the possible role of high temperature in the sudden infant death syndrome will probably increase parental anxiety about measuring children's temperature.

Measuring the temperature is an important part of assessing an unwell infant.¹ Subjective assessments of the presence or absence of fever are unreliable,² and a raised core temperature is more likely to indicate a serious problem in an infant who does not feel hot.

But where should the temperature be taken? In continental Europe parents and health professionals routinely take infants' temperatures rectally. In Britain parents favour the axilla; this is in line with current British health education³ and, in general, with the advice of midwives and health visitors. In a survey of general practitioners' attitudes published in this week's journal only half the general practitioners questioned would consider taking a rectal

temperature in infants, while a substantial minority believed that there was no place for taking rectal temperatures in general practice (p 961).⁴

Some doctors have argued against measuring the rectal temperature because of the risks of thermometer breakage,⁵ rectal injury,⁶ and cross infection.⁷ These risks have been exaggerated. Reviewing the literature Morley and colleagues estimate the risk of rectal perforation by a thermometer at less than one in two million.⁸ Such minute risks are far outweighed by the superior reliability, speed, and convenience of rectal temperature measurement.

Several studies have shown the unreliability of axillary temperatures in children.⁸⁻¹¹ Using conventional mercury in glass thermometers placed in the axilla for eight minutes, Kresch found a sensitivity for fever of only 33%,⁹ while Weiss *et al*, using electronic thermometers, concluded that axillary temperatures were unsuitable for use as a screening test because of poor sensitivity.¹⁰ In a study of 937 infants under 6 months Morley and colleagues found axillary measurement to have a false negative rate for fever of 75% in the home and 27% in hospital⁸—both unacceptably high. Axillary and rectal measurements were found to differ inconsistently by up to

3°C. Studies showing that axillary placement is satisfactory are marred by inadequate description of the method or inappropriate statistical analysis.^{12 13}

Little consensus exists on how long thermometers should be left "to cook," but there is no doubt that rectal temperatures may be read sooner. An American study of mercury in glass thermometers in afebrile adults found that the time taken for 90% of thermometers to reach an optimum reading (defined as within 0.2°F of the eventual maximum) was two minutes in the rectum, seven minutes in the mouth, and nine minutes in the axilla.¹⁴ Three quarters of rectal thermometers had reached the optimum within one minute. For the axilla, manufacturers' instructions recommend placement for five minutes for electronic thermometers and three minutes for disposable thermometers. In practice, rectal placement of a mercury in glass thermometer for one minute will rarely miss an appreciable fever while an electronic thermometer can be read in seconds.

Properly done, measurement of rectal temperature is less disturbing for the infant than having an arm pinioned to the trunk for several minutes. With the infant supine and lengthwise on a bed or couch the nappy is undone and both ankles are firmly held in one hand so as to flex and abduct the hips revealing the anus. With the other hand the examiner holds the thermometer, which has been well shaken down, between finger and thumb, 2–3 cm from the bulb. Lubricated with a little K-Y jelly and held at an angle of about 30° to the horizontal, bulb end lowermost, the thermometer is gently inserted for a minute or two, with the flexed legs held firmly in the other hand. Familiar with this position from having their nappies changed, infants will usually not be too bothered. Keeping up conversation helps maintain a non-threatening atmosphere. Rectal temperatures of 36.5–37.5°C may be considered normal. Proper cleaning of the thermometer is important; it should be washed, dried, and disinfected—for example, by rubbing with a spirit impregnated swab.

With this method injury to the rectum is virtually impossible. The technique is not difficult. In field trials of Baby Check (a scoring system to grade the severity of acute illness in babies)¹⁵ mothers received written instructions on how to take rectal temperatures; only 6% found it difficult. Aesthetic objections were a bigger problem: two in five mothers initially disliked taking the rectal temperature, though this fell to one in five among those visited regularly by a research nurse.

Taking rectal temperatures, like some other continental practices, offends Anglo-Saxon sensibility, but it's time for this prejudice to go. In assessing a sick infant it is safe, quick, and reliable. If knowing an infant's temperature is important then the rectal method should be used. If not, no temperature should be taken.

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Keeping babies in prison

Regime should be more compassionate

The first good look at mother and baby units in Britain's prisons suggests that children are being condemned to a "squalid" and "destructive" start in life. A report by a team from the Department of Health commissioned by the Home Office describes babies lying inert on playmats for long periods and toddlers strapped in buggies in front of videos and claims that in two of the three prisons with facilities "there was no space for babies to be anything but static."¹

The report gives the overwhelming impression that the prison regime comes first and that it restricts the children as much as their mothers. In one unit breast feeding was strongly discouraged and babies were fed according to the clock—even being woken at night to have a bottle. Mothers were not allowed to take their babies into bed with them. Ethnic differences in child rearing were frowned on.

In two of the units mothers were expected to work or attend classes; the crèche was run by fellow prisoners and overseen by prison staff, none of whom were experienced in child care. The diet for pregnant women, mothers, and babies is criticised as lacking fresh fruit and vegetables. There were no facilities for mothers to cook for their children, and mothers

were locked up with their children for 12 hours each night in rooms that often had open toilets.

As if poor facilities and archaic regimes were not enough, the units are also accused of punitive treatment. Another report from the National Association of Probation Officers noted that one way of disciplining mothers was to separate them from their babies.² Pregnant women in particular have a hard time in prison, often working until they go into labour and being referred to by staff as "pregs." The pressure group Women in Prison claims that prisoners have a higher rate of stillbirths than other women. A report on Holloway prison by the chief inspector of prisons said that the number of babies weighing under 2500 g was twice the national average.³

Under Home Office rules the secretary of state "may, subject to any conditions he thinks fit, permit a woman prisoner to have her baby with her in prison, and everything necessary for the baby's maintenance and care may be provided there."² Britain has only 39 places for mothers and babies in three prisons, Askham Grange and Styal in the north and Holloway in the south. Mothers are separated from their babies at 9 months in Holloway and at 18 months in the other