Effective gynaecological practice and evidence-based medicine

Today we are all expected to practice evidence-based medicine. However, there are many problems with regard to this in gynaecology, as in many areas, because the evidence base is sadly lacking. Obstetrics is much more advanced, with evidence based on randomized controlled trials being promoted heavily by Iain Chalmers, particularly in 1989 with the publication of *Effective Care in Pregnancy and Childbirth*.

Subsequently the Cochrane Collaboration was developed and currently there are active groups reviewing the literature in a number of gynaecological fields. However, waiting for these definitive reviews is no excuse for not attempting to use best practice.

CURRENT GUIDELINES

The Royal College of Obstetricians and Gynaecologists has, with funding from the Department of Health, produced national guidelines on management of menorrhagia in the primary care setting (Royal College of Obstetricians and Gynaecologists, 1998a) which will be shortly followed by those for care in the secondary sector.

Three infertility guidelines are being produced and those in the primary and secondary health-care setting have already been published (Royal College of Obstetricians and Gynaecologists, 1998b,c). Guidelines on sterilization are also being published. All of these guidelines have used the current agreed classification of evidence of:

A. Evidence based on randomized controlled trials
B. Evidence based on other robust experimental or good observational studies
C. More limited evidence, but the advice relies on expert opinion and has endorsement of respected authorities.

In addition the Royal College of Obstetricians and Gynaecologists has produced brief guidelines on a number of topics in gynaecology, recent ones including induced abortion, recurrent miscarriages, ectopic pregnancy and peritoneal closure.

EVIDENCE BASE IN GYNAECOLOGY

So what is the strength of the evidence base in gynaecology? It is actually quite depressingly poor in many areas. While there are a significant number of randomized controlled trials in areas of the management of subfertility, termination of pregnancy and menorrhagia, in other areas the evidence is weak.

Gynaecological oncology management has almost no randomized controlled trials. There are some comparing different agents used for chemotherapy for ovarian cancer, which is obviously important, but the basic studies on whether or not to use it are of limited value. Where is the evidence to support the Calman–Hine proposals for gynaecological oncology services? It is almost non-existent and is certainly not based on grade A evidence. Even randomized controlled studies on the management of common conditions such as cervical intraepithelial neoplasia are similarly almost non-existent.

Gynaecological urology is little better, despite incontinence being such a common problem. Evidence that local oestrogens help incontinence in the postmenopausal group appears sound. Also it appears clear that no single operation for stress incontinence will be appropriate for all women, and therefore gynaecologists performing incontinence surgery need to be competent with more than one procedure. Apart from the need to look carefully for urinary tract infection and treat as appropriate, one is left with little else.

For general gynaecology there are a number of clear messages. Infectious morbidity is amazingly high after hysterectomy (up to 40% by 3 months, Clarke et al, 1995) and prophylactic antibiotics clearly reduce this risk. The data on thromboprophylaxis in gynaecology are non-existent, but the strong consensus view is that it should be used with major surgery (Royal College of Obstetricians and Gynaecologists, 1995). Gynaecological units can rapidly and easily audit these two topics to ensure compliance.

However, the picture is not too depressing as considerable gynaecological resources are expended on women presenting with pelvic infection, miscarriage, subfertility, unwanted pregnancy and heavy menstruation. Good evidence is available for a number of aspects of management, and with the volume of cases readily available it should be feasible to check that the best practice is occurring.

PATIENTS *VS* EVIDENCE

However, medicine is not a pure science. People do not behave in the same way and putting effective procedures into practice involves at least two different people — the patient and the clinician. Patients may not necessarily want what is best. For instance endometrial resection and ablative techniques are likely to avoid a woman needing to have a hysterectomy in about 75% of cases and in the older woman (e.g. over 45 years of age) the chance is even higher. However, many women still want a hysterectomy despite it being shown in randomized

trials that it has higher morbidity than endometrial resection or ablation.

A gynaecologist may feel that the particular circumstances a woman has does not fit into criteria of the randomized controlled trials, which may not have been that pragmatic, and therefore the gynaecologist may feel it appropriate to break guidelines. This is likely to be totally acceptable, although it should be justified in the case notes.

Another reason why effective practice may not be followed is when a surgeon is not that skilled in a particular technique. Vaginal hysterectomy for menorrhagia would be a good example. Most surgeons conduct hysterectomies by the abdominal route when the vaginal route, in trained hands, avoids an abdominal scar and may have less morbidity. Women need to be informed of the choice and the gynaecologist needs to offer it. If the woman opts for a procedure which the gynaecologist is unhappy about she needs to be then given the choice of changing gynaecologist or having the gynaecologist's preferred technique.

CONCLUSIONS

The evidence base is developing in gynaecology and is summarized in a recent Royal College of Obstetricians and Gynaecologists document entitled *Effective Procedures in Gynaecology Suitable for Audit* (1999). However, the application of this evidence needs to be in a thoughtful way. HM

KEY POINTS

- Guidelines based on randomized controlled trials are lacking in many areas of gynaecology.
- Recent high quality guidelines have been published on sterilization, infertility and menorrhagia management.
- The evidence base in gynaecological oncology is almost non-existent and is little better in urogynaecology.
- The agreed standards of using antibiotics and thromboprophylactic measures with major gynaecological surgery are readily auditable.
- However, guidelines cannot be applied without consideration for the patient as an individual and the circumstances surrounding her treatment.

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