An admirable example of enhancing adherence by offering
a synthesis that allows for the patients' pain beliefs is offered
by Feinnman et al. They sidestep the psychological-physical
divide neatly by offering an explanation of pain that empha-
sises the role of muscular tension in its genesis, then prescribe
the antidepressant dothepin hydrochloride, emphasising its
muscle relaxing properties.

Antidepressants are the most successful and widely evalu-
ated drugs used to treat these types of "psychogenic" facial
pain, and their benefits seem to be independent of any
antidepressant action. There is no good evidence to support
the use of one drug over another, or of particular dosage
regimens, although most trials have used doses over the
equivalent of 100 mg of amitriptyline a day. Treatment needs
to be persisted with for several months. When there is burning pain in the oral mucosa, treatment
with vitamin B-1 may be useful, even in the absence of
measurable deficiency. Benzodiazepines may be helpful, but
their use should be avoided as dependence soon develops.
Enhancement of the analgesic effects of antidepressants with
low dose neuroleptics has been advocated, but recent
evidence suggests that there is no benefit. Almost every
author who writes on the subject says that surgery should
be avoided and may make things worse.

Psychological treatments can be helpful, and their use has
been well reviewed by Bond and Hughes. Such treatments
include behaviour therapy, relaxation, biofeedback and hy-
ponosis, and cognitive psychotherapies. Unfortunately, gener-
ally only psychiatric services have access to these. In spite of
the calls of Bond and Hughes and many others for the
establishment of regional multidisciplinary pain management
units there are very few in the United Kingdom.

Chronic orofacial pain can be a disturbing problem for
patient and doctor. If attention is paid to reconciling the
patient's experiences and expectations of treatment with a
proposed course of treatment the outcome can be successful
and the prognosis good. These difficult patients can then
become a rewarding group to treat.

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Clinical review articles

Should be as scientific as the articles they review

Much of medical knowledge is highly perishable. The first
credible news of fresh advances appears in peer reviewed
medical journals, but clinicians who try to upgrade their
knowledge by reading medical journals face a formidable
task. Most studies provide preliminary evidence at best
because of limited scope, poor design or execution, or a
sample size inadequate for important clinical benefits or
adverse effects to be detected, or because of the play of
chance. Thus the reader must appraise each report and
compare and integrate it with previous evidence to reach a
decision about whether clinical policy should be changed on
the basis of the accumulated information.

Even when an original study is definitive by itself it will
seldom address more than a portion of the clinical range of the
problem. Inclusion and exclusion criteria for clinical trials,
for example, typically select for the patients who are at highest
risk of suffering bad consequences from their disorders and
are most likely to respond to the intervention being tested,
leaving the reader to speculate whether other patients might
benefit.

Clinical readers may take a shortcut through this difficulty
by reading review articles in which someone else has taken the
trouble to round up the evidence from available studies on a
clinical problem. But unless the review is constructed in an
exacting fashion that does justice to the original evidence the
reader may end up with false conclusions (the brunt of which
may be borne by patients). Indeed, Mullan found that none of
50 reviews published in four major American medical
journals in 1985 and 1986 met all of eight criteria for scientifically sound summaries of evidence. Most
disconcertingly, "Only one had clearly specified methods of
identifying, selecting, and validating included information."

Following the pioneering work of Thomas Chalmers and
his colleagues in resolving disputes in published medical
work, Mullan and others have called for more scientific
procedures for review articles and Oxman and Guyatt have
published a "reader's guide" for clinicians who want to be
sure that a review article provides an unbiased view of the
truth. To be true to evidence reviews must articulate a clear
question or set of questions, find and select pertinent
published (and sometimes unpublished) evidence in an
unbiased and reproducible way, determine whether there is
enough consistency in the studies to warrant pooling their
results, characterise the findings in a way that is statistically
valid, and reach a conclusion that readers can verify for
themselves. Thus the reviewer should adhere to the same
scientific principles in summarising studies as the investiga-
tors of those studies did (or should have done) in generating
the original evidence. In other words, the review article itself
should be the product of scientific investigation in which the
participants are original investigations rather than patients.

These standards, crystallised by social scientists, have
taken hold slowly in reviews of published biomedical reports
over the past decade and are still far from the norm in the
review articles that are published today. Buyer beware:
unsystematic reviews lead to unsystematic conclusions.

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Transvaginal ultrasonography

Useful for diagnosis

Ultrasoundographic imaging was introduced by Donald into obstetrics and gynaecology to differentiate a pregnancy from an ovarian mass in an obese patient. Computer technology has led to further advances, and with "real time" ultrasoundography the equipment is easier to handle and the technique easier to learn. Transvaginal sonography is the most recent form of imaging to be introduced in gynaecology, overcoming the disadvantages of abdominal or surface ultrasonography. These disadvantages include the distance between the organs being imaged, the difficulty of obtaining clear images of deep structures, and, with abdominal ultrasonography, the need for a full bladder to allow imaging of organs in the true pelvis.

Gynaecological pelvic examination requires an empty bladder. In current practice, if a pelvic mass is felt on digital examination ultrasonography is used to establish the nature and origin of the mass. Because a full bladder is needed for abdominal ultrasonography the patient has to drink a litre of water and then wait for an hour, before the procedure may be performed. This complicates its routine use by gynaecologists. Transvaginal sonography, however, requires an empty bladder—making it a complementary examination to the conventional pelvic examination.

The indications for transvaginal sonography are the same as for pelvic examination. It should be performed after a speculum and digital examination. The inaccuracy of digital examination in detecting ovarian cysts and the advantage of imaging structures within the pelvic organs hardly needs elaborating. Even with laparoscopy only information on the surface of the pelvic organs is obtained. Transvaginal sonography performed before laparoscopy may provide information on intrauterine disease as well as the contents of ovarian cysts. The finding of multiloculated ovarian cysts, for example, would dissuade laparoscopists from attempting their aspiration.

Although transvaginal sonography, like so many other new gynaecological techniques, was first used to detect, monitor, and aspirate Graafian follicles, its use is now routine in assisted conception centres, and its applications in diagnosis and treatment procedures are expanding rapidly. Its use in gynaecological practice as a complement to pelvic digital examination is now commonplace in the United States (I E Timor-Tritsch, personal communication) and Germany (L W Popp, personal communication), where more than half of gynaecologists in private practice have a transvaginal scanner in their consulting rooms.

Transvaginal sonography may be used to differentiate ovarian from tubal masses, and viable from non-viable pregnancies, and may reduce the need for dilatation and curettage procedures in patients with postmenopausal bleeding. Interventional transvaginal sonography facilitates chorionic villus sampling and early amniocentesis. Reproductive endocrinologists use it to recover oocytes, cannulate the fallopian tubes, and aspirate ovarian cysts—which can be performed under sedation on a day care basis. Its role in differentiating benign from malignant ovarian lesions, staging cervical cancer, and aiding needle biopsy is still under investigation.

The usefulness of transvaginal sonography in the early detection and treatment of ectopic pregnancy may ultimately have a greater impact on maternal mortality than any other recent development in gynaecology. Transvaginal sonography can...