amniotomy is preferable to high, since it is more certain in its
effect, the interval between induction and delivery is shorter,
and the risks of intrauterine infection and fetal pneumonia
are lower.5 6 Oxytocics are commonly given to stimulate
uterine activity when artificial rupture of the membranes has
not been immediately successful. G. W. Theobald7 recom-
mented that an oxytocin infusion in “physiological” doses of
up to 5 millilitres a minute should be instituted if labour had
not begun within 24 hours of rupture of the membranes.
This practice has been widely adopted, though larger amounts
of oxytocin are often used,8 the dosage depending on the
sensitivity of the uterine muscle.

In this issue of the B.M.J. Dr. M. E. Pawson and Mr. S. C-
Simmons make a convincing plea for an even more active
approach to induction, and they suggest instituting an infusion
of oxytocin at the time of amniotomy. Of their patients 76%
were delivered within 12 hours and 87% within 24 hours,
figures which are in close agreement with those of W. P.
Bradford and G. Gordon.9 Such results may not in themselves
be of virtue, but many advantages accrue. In most cases the
indication for induction carries with it the implication that
there are potentially greater hazards than normal for the fetus
and therefore a greater need for careful supervision during
labour. Such supervision is more readily achieved during the
day, when staff and ancillary services are available, than in
the night hours.

Reduction in the interval between induction and delivery
lowers the risk of infection. M. J. Muldoon10 reported an
incidence of pyrexia of only 5%, in patients delivered within
24 hours of amniotomy as compared with 25% in patients
who were delivered in 24-48 hours. Of more importance, he
detected pathogenic organisms in cultures from the placenta in
only 2-6% of cases delivered within 24 hours but in 40% when
delivery was between 24 and 48 hours. Most obstetricians
would agree that it is preferable to effect delivery before
infection is likely rather than to temporize and rely on large-
scale prophylactic antibiotic therapy, which gives uncertain
protection and encroaches the growth of resistant strains of
organisms.

It may be argued that delivery would be achieved within
24 hours in at least two-thirds of cases even without the use of
oxytocin and that the drug was unnecessary in such cases.
But it is not easy to predict which patients will fail to respond
to amniotomy alone, and, though more supervision than usual is required during the period between induction and
delivery, that period is shorter and the work for the staff
probably less than when more conservative policies are
adopted. Active policies, while possessing advantages, must
also create potential dangers, particularly those resulting from
excessive uterine activity. Uterine rupture and fetal asphyxia
may occur. Water intoxication from excessive administration
of intravenous fluids may even be a risk.11 12 There is much to
be said for the use of more concentrated oxytocin solutions
given in a carefully controlled manner by an infusion pump,11 12
especially for those patients who already have excessive
fluid retention.

The good maternal and fetal results in recent reports
testify to the careful control and supervision which has been
considered implicit in the units from which they come. Inferior
standards of care are inevitably reflected in the results obtained,
but unfortunately in such circumstances results are rarely
published. It is important that further steps in providing
active assistance to parturition are tempered with caution,
taken with adequate safeguards, and supported by the resources
of fully equipped and staffed maternity units.

Appendicitis in Elderly Patients

Though we still do not understand why appendicitis develops,
diagnosis and management are sufficiently straightforward
in children and young adults for it to be regarded as a minor
illness with a relatively small risk. The condition is, however,
much more serious in elderly people, in whom there is a
greater risk both of fatal and non-fatal complications. So
doctors should know how (if at all) the clinical features of
appendicitis differ in older patients and also whether there
should be a different approach to the management of the
disease in old people to reduce the disturbingly high figures
of morbidity and mortality—the latter ranging 1 2 from 2% to
14%.

There are several possible explanations for the increased
risk in elderly patients. Inevitably, there will be an increased
incidence of concomitant chronic disorders such as the
degenerative cardiac and respiratory diseases. The number of
alternative causes of intra-abdominal inflammation is perhaps
greater in the old than in the young, so that differential
diagnosis may pose greater problems. The defences of the old
patient against acute inflammatory episodes might be less
efficient, with poorer localization of the infection. Destructive
changes in the appendix may occur more rapidly, partly
owing to sluggish defence responses, and also, perhaps,
partly owing to impaired blood supply through atherosclerotic
vessels. Finally, elderly patients may be less likely to complain
of pain and other troublesome symptoms, putting up with
them in a more resigned fashion, and thus presenting a less
dramatic clinical picture.

The clinical features and outcome of appendicitis in a group
of patients over the age of 60 years and in controls below this
age limit were compared in a recent study from Helsinki,
Finland1. The authors found the main clinical features—the
pattern and duration of the symptoms, the temperature
changes, and the leucocyte responses—were exactly the same
in the two groups. But there was a striking difference in the
operative findings. Both gangrenous changes and perforation
of the appendix occurred five times as often in the older age
group. These findings support the view that poorer localization
of the infection and diminished blood supply are important
factors in allowing rapid progression of the disease. Since
patients with perforation of the appendix had a significantly
higher incidence of other postoperative complications, notably
infection, it seems likely these risks could be reduced only by
earlier operation.

Naturally, there is a limit to which the risks of even straight-
forward surgical treatment may be reduced in elderly patients.
In the Helsinki study half the deaths were from cardio-
vascular disease, but the rest seemed clearly related to the
appendicitis and its treatment, and it is that contribution to
the overall mortality that should be further reduced. The
continuing difficulties in preventing and treating infection are
underlined by the fact that one-third of the patients over the
age of 60 years in the Finnish series were kept in hospital
longer than the average five postoperative days on account of
infective complications.

So the main problem with acute appendicitis in aged
patients is not so much atypical clinical presentation as the
rapid progression of the disease to the serious complication of
perforation. Though on average there may not be much
greater delay in reaching the correct diagnosis in elderly
patients, any such delay seems to be more dangerous.

Peltokallio, P., and Iaahuinen, K., Archives of Surgery, 1970, 100, 140.