paid. The cost savings from non-transplanted
livers were equally impressive even at the
discounted price of £30,000 per transplant. Are
we to believe that these spare livers would not be
used for some equally deserving cases thus
resulting in no net saving to the health
service? As a paediatrician I remain uncon-
vinced by the arguments advanced that a
cost-effective screening programme at two
years after delivery will solve this clinical dilemma.

1 Mowat AP, Davidson LL, Dick MC. Earlier iden-
tification of biliary atresia and hepatobiliary dis-
erases: screening in the third week of life.
Arch Dis Child 1995; 70: 90–2.

Professor Mowat and Dr Dick comment:
We are please to have Professor Matthew's
support in trying to achieve surgical treatment
for all infants with biliary atresia by 60 days of
age. Because we share some of the concerns
he expresses, we do not advocate screening for
biliary atresia but selective screening or
more correctly case finding by detecting
conjugated hyperbilirubinina in jaundiced
infants and then using all forms of hepatobiliary
disease. Mowat will have other hepatobiliary
disorders for which early and specific treat-
ment is desirable. By screening at the same
time as the infant is being assessed by com-
munity health staff to reassure parents much of the
cost and logistic difficulties will be minimised.

King's Healthcare Trust is undoubtedly in
the real world. Next year the cost for a direct
bilirubin will increase to £4.00 including all
overhead. Since surgery our two years 25
infant aged 18 days with biliary atresia was
'overlooked' by a member of our junior staff.
The total serum bilirubin concentration was
72 μmol/l. We cannot stress strongly the infant with
biliary atresia in the first weeks of life
appears well. The only constant abnormal
clinical feature is jaundice which may be very
mild and urine which is persistently yellow and
newborn. In the last two years 25
infants and children in UK died while on
waiting lists for liver transplantation. If any of
these were alive because a selective screening
made transplantation unnecessary for one
child with biliary atresia, would any paediatrici-
an object?

Because the optimum time for screening is
debatable, community staff in our district
are testing for conjugated hyperbiliru-
binina in jaundiced infants of different ethnic
backgrounds. This study funded by the
Children's Liver Disease Foundation will
clarify logistical difficulties and the prevalence of
benign jaundice in the third and fourth
week after birth.

Double blind placebo controlled trial of
pizotifen syrup in the treatment of
abdominal migraine

EDITOR,—Now and then the concept 'abdominal migraine' appears in the literature
as if it were a fact. I have always been reluc-
ant to accept it as a special entity. The only
thing that distinguishes it from recurrent
abdominal pain in Apley's definition is the
exclusion of the milder cases. 1 2 The demon-
stration of a special visual evoked response
pattern in certain migraine and abdominal
migraine is of course interesting, 3

but it is necessary to do this test in an
unselected group of children with recurrent
abdominal pain, to see if it delimits a special
sub-group among children with recurrent
abdominal pain. If it is a common phenomenon in children with recur-
rent abdominal pain. Even if it should delimit a special group it might just be a question of
severity. I am not able to refute the existence of
abdominal migraine. But until now nothing except severity seems to justify the concept.

Migraine in a close family member is a pre-
requisite for the diagnosis of abdominal
migraine. 2 But not even this criterion seems to
be of any help, as accumulation of several
kinds of presumed psychosomatic symptoms
including headache is very common in children with recurrent abdominal pain and
in their families. 4 I would still prefer the
expression recurrent abdominal pain for all
bellyachers, at least until we know more about
aetiology and pathogenesis.

These reflections should be seen as a com-
ment on the paper of Symon and Russell
showing effect of pizotifen in children with
abdominal migraine. 3 It is of course important
to show that pizotifen does work. But the
paper gives rise to two important questions.
How does pizotifen work on all children with
recurrent abdominal pain? And does the effect of pizotifen in a group of children with
severe pain justify the migraine diagnosis?

Aetiology of recurrent abdominal pain is
not certain but it is likely that psychosomatic
mechanisms are operative. In the complex pathogenesis different peptides
and motility may be important factors. 5 It is
in this context that the effect of pizotifen
should be considered.

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1 Apley J. The child with abdominal pains. 2nd Ed.
2 Symon DNK, Russell G. Abdominal migraine: a
childhood syndrome defined. Cephalalgia 1986;
3 Mortimer MJ, Good PA, Marsters JB, Addy DP.
Visual evoked responses in children with
migraine; a controlled double blind placebo
4 Christensen MF, Holm E, Sahlholdt I.
Receivierende mavnicken was danske skole-
5 Symon DNK. Rats blind placebo
controlled trial of pizotifen syrup in the treat-
ment of abdominal migraine. Arch Dis Child
6 Lindberg T. Recurrent abdominal pain in

Dr Symon and Dr Russell comment:
Recurrent abdominal pain is a symptom and
not a diagnosis. We find no difficulty in
accepting that children with recurrent
headaches may be suffering from a wide
variety of different diseases, including
migraine, tension headaches, and even cer-
bral tumours. Similarly recurrent abdominal
pain may be the final symptom of a wide
variety of disease processes. In our practice
the commonest cause of recurrent abdominal
pain is constipation. The concept that all
recurrent abdominal pain is psychosomatic
in origin has been discredited by the absence
of any statistically significant differences
between those with recurrent abdominal
pain and pain free children with regard to
various physiological variables thought to be
associated with psychogenicity. 1

The children whom we treated in our trial
were not suffering from recurrent severe disabling
symptoms. Unlike bellyachers their symptoms came in discrete
attacks with complete normality between
episodes. We accept that the term 'abdominal
migraine' is not universally accepted but the
arguments for this were fully rehearsed in a
recent clinical controversies article. 6 Perhaps
there would be fewer objections if the syn-
thesis could have a different epithet such
as Buchanan's syndrome, 6 as some people
wish to reserve the term migraine solely for
headaches on the basis of its presumed
tymological derivation from hemicania.

We would not expect pizotifen to be of
benefit in all children with recurrent abdomi-
nal pain and logically we feel that it is unlikely
that pizotifen would be of value in recurrent
abdominal pain other than abdominal
migraine. We are not aware of any trials of
the use of pizotifen in recurrent abdominal
pain other than our own trial in abdominal
migraine.

To lump together all children with recur-
rent abdominal pain as having psychosomatic
pathology is to do grave disservice to those
patients who come to us seeking relief of
their symptoms.

1 McGrath PJ, Goodman JT, Firestone P, Shippman
R, Peters S. Recurrent abdominal pain: a psy-
chosomatic disorder? Arch Dis Child 1985; 58:
888–90.
2 Symon DNK. Is there a place for 'abdominal
migraine' as a separate disease? Aetiology
and Russell G. Abdominal migraine: a
childhood syndrome defined. Cephalalgia 1985; 12:
346–8.
3 Buchanan IA. The abdominal forms of migraine.
J Neurol Ment Dis 1921; 54: 406–12.

Medicalisation of the normal
variant—treatment of the short,
sexually immature adolescent boy

EDITOR,—I enjoyed Christopher Kelner’s
annotation but as a non-endocrinologist am
unhappy about his advice for delayed puberty
in the absence of disease that "boys over 14
years of age ... who have impaired self image
and social withdrawal not responding to
reassurance" should be considered for treat-
ment. Is this "should not be denied when
appropriate"? 1

There are two issues. Firstly the wide-
spread use of potent endocrine agents for a
disease state that is not always defined or
specific. We are not sure that there will be no long term adverse effects
during the lifetime of the individuals
concerned or, indeed, of their progeny? Patients
need to know whether they want to take the
risks and doctors need to be accountable", states
Brendon Nelson, the president of the
Australian Medical Association, in consider-
ing the unexpected long term consequences
of another endocrine intervention, Cretz-
feldt-Jakob Disease. 2 The prospect of perma-
nent gross dwarfism probably, even in
retrospect, justified the, at the time unpre-
dictable and thus unquantifiable, long term
disease. Does the transient and common phe-
nomenon of delayed puberty? We must surely
include permanence as well as severity and
incidence in any therapeutic cost benefit
analysis.

Secondly, and more importantly, we need
to be careful, as paediatricians, not to narrow
the range of accepted normality and to
medicalise normal variation. A teenager with
delayed puberty may have impaired self image
and social withdrawal at the age of 15. Where
is the evidence that short term manipulation
of the situation with drugs is of long term
effect on the psychology of the future
man, quite apart from its implications

1 National Endocrine Society. Guidelines for
sexual immaturity: growth hormone therapy for
machismo and smallness. Pediatrics 1975;
56: 100–6.
Double blind placebo controlled trial of pizotifen syrup in the treatment of abdominal migraine.
M F Christensen

Arch Dis Child 1995 73: 183
doi: 10.1136/adc.73.2.183-a

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