centrations. In most reports the pleocytosis has not been examined further by differential count. A mild (3%) cerebrospinal fluid eosinophilia has been documented with immunoglobulin and in aseptic meningitis after other drug treatment.[1 5] In our case cerebrospinal fluid was specifically analysed and stained to provide an accurate differential count. The presence of eosinophilia enabled aseptic meningitis to be diagnosed and antibiotic treatment to be stopped, also avoiding extensive contact tracing.

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Dentists' agreement on treatment of asymptomatic impacted third molar teeth: interview study

Colwyn M Jones, Kevin O'Brien, A S Blinkhorn, J P Rood

Department of Dental Medicine and Surgery, University of Manchester, Manchester M15 6FH
Colwyn M Jones, *senior registrar in dental public health*
Kevin O'Brien, *professor*
A S Blinkhorn, *professor*
J P Rood, *professor*

Correspondence to: Mr C M Jones, Public Health Medicine, Wigan and Bolton Health Authority, Bryan House, Wigan WN1 1AH

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The main indications for removal of a third molar tooth were outlined at a consensus development conference of the National Institutes of Health in 1979.[1] These are (*a*) acute or chronic infection in a third molar tooth, (*b*) damage to adjacent teeth, (*c*) irreparable decay in the tooth, and (*d*) a cyst or space occupying lesion in the tooth. Currently a quarter of third molar teeth are removed without being diseased,[2] and the need for their removal has been questioned.[3] We measured the variation in and reliability of decisions made by a random sample of dentists about the treatment of asymptomatic impacted third molar teeth.

Subjects, methods, and results

We prepared case notes for 25 patients that contained details of the patient's age and sex, a colour intraoral photograph of one asymptomatic lower third molar tooth, and a monochrome glossy print of a radiograph of the lower jaw. All of the patients attended a dentist regularly, and none of them had any coexisting medical or dental conditions to influence the removal or retention of the tooth. The photographs in two cases were poor quality, so only 23 cases were included in the study. A random sample of 90 dentists was selected from the 391 dentists listed by the family health services authorities in two district health authorities in the north west of England. We made an appointment with each dentist to view the case notes and record his or her recommendation. A second assessment was carried out one month later. To prevent dentists from memorising individual cases we asked them if they would repeat the exercise only after they had completed the first assessment. The agreement within each dentist (individual reliability over time) was calculated with the κ statistic. Interexaminer agreement was calculated with multiexaminer κ.[4] Significance was taken as $P < 0.05$.

Seventy four dentists agreed to take part in the study; 16 had left or retired when we tried to contact them. All 74 completed the first and second assessments.

At the first assessment the dentists suggested extraction of 0 to 19 teeth (median 6; mean 7.05 (95% confidence interval 5.91 to 8.19)). At the second assessment they suggested extraction of 0 to 21 teeth (median 6; mean 6.77 (5.62 to 7.92)). Agreement between dentists was fair at the first assessment ($\kappa = 0.22$ (0.21 to 0.23)) and poor at the second ($\kappa = 0.11$(0.10 to 0.11)). The reliability of the dentists' decisions over time varied from excellent ($\kappa = 1.00$) for 10 dentists to extremely poor (negative κ score; worse than chance) for one dentist. For 17 dentists reliability was excellent ($\kappa = 1.0$ to 0.80), for 10 good ($\kappa =$ 0.79 to 0.6), for 22 moderate ($\kappa = 0.59$ to 0.4), for 19 fair ($\kappa = 0.39$ to 0.2), and for 6 poor ($\kappa < 0.2$).

Comment

This study highlights the poor agreement between dentists making decisions on the extraction of asymptomatic lower third molar teeth. Uncertainty in predicting the clinical outcome of leaving an asymptomatic impacted third molar in situ may encourage elective removal.

The surgical removal of teeth is not without risk, especially the risk associated with general anaesthesia. Surgery is also associated with postoperative pain and facial swelling, leading to time lost from work. Up to 6% of patients have paraesthesia of the tongue or lower lip, and 1% have permanent nerve damage.[5]

We suggest that referrals of asymptomatic third molars could be reduced by improved education and the introduction of clinical guidelines.

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Why are babies getting heavier? Comparison of Scottish births from 1980 to 1992

S R Bonellie, G M Raab

Over the past decade the weights of babies born in the United Kingdom have been increasing,[1] which may have implications for the pattern of adult disease.[2] From 1980 to 1992 the mean birth weight of live singleton births in Scotland increased steadily from 3326 g to 3382 g. We investigated factors that may explain this trend.

The distribution of gestational age has changed noticeably over the past decade because of the gradual introduction of its assessment by ultrasonography.[3] In 1980 around 42% of all live births occurred at 40 weeks' gestation; by 1992 this had fallen to 32%. Thus trends in birth weights adjusted for gestation may be misleading and are not considered here.

Subjects, methods, and results

We assessed data on live, singleton births in Scotland as entered on SMR2 forms (discharge sheets for maternity admissions), to develop a predictive model for birth weight. The data covered about 94% of live singleton births from 1980 to 1992. Regression models for boys and girls were fitted separately using maternal age (linear and quadratic terms), height (linear and quadratic terms), and parity (null parous *v* other). A separate term was fitted for each calendar year. Each of these factors had a significant effect on birth weight.

From 1980 to 1992 mean maternal height increased from 160.0 cm to 161.9 cm, mean maternal age increased from 25.8 to 27.1 years, and the percentage of first births increased by about 2.5%. Changes in both mean maternal height and age were reflected by an overall upward shift in distribution.

Table 1 shows the effects of changes in maternal height, age, and parity on birth weight. For both sexes the difference in mean birth weight was substantially reduced when the increase in maternal height was taken into account. The increase in maternal age also reduced the difference, but the change in parity had the opposite effect as first babies have lower birth weights on average. Almost half of the difference in mean birth weight between 1980 and 1992 can be explained by changes in these three factors, the increase in maternal height having the largest effect. When all three variables were included in the model the effect of maternal age on birth weight was smaller since younger women are much more likely to be having their first babies.

Increases in mean birth weight between 1980 and 1992 for boys and girls born in Scotland.

	Boys (n=393 122)	Girls (n=372 470)
Unadjusted	59.5	54.0
Adjusted for maternal height only	32.4	31.9
Adjusted for maternal age only	47.3	42.9
Adjusted for parity only	63.1	56.6
Adjusted for maternal age, height, and parity	30.5	29.1

All SEs are about 4.3 g.

Comment

A decrease of 7% in the proportion of induced births over the past decade may explain about 10 g of the increase in birth weight. Other factors associated with low birth weight are maternal smoking and social deprivation.[4] The proportion of women who smoke in Scotland fell from 42% in 1980 to 34% in 1992.[5] The SMR2 form cannot be used to establish whether the same is true for mothers since information on smoking was not collected before 1992, but a decrease in maternal smoking may explain some of the remaining trend to higher birth weights.

The relation with socioeconomic status is more complex. Other factors which are potential causes of low birth weight, such as maternal diet and lifestyle, may also be associated with deprivation. Similarly, dietary and lifestyle factors in the last generation may explain the increase in maternal height. Our results suggest that improvements in socioeconomic status may not be seen fully as increased birth weight for two generations. A more comprehensive study would be required to ascertain the effect of this increase on the health of the adult population.

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Department of Mathematics, Napier University, Edinburgh EH10 5DT
S R Bonellie, *lecturer*
G M Raab, *professor*
Correspondence to: Dr Bonellie

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Endpiece

Urine examination required

A Serving man brought his master's water to Doctor Butler, being then in his Studie, but would not bee spoken with. After much fruitless importunity the man tolde the doctor he was resolved he should see his Master's water; he would not be turned away, threw it on the Dr's head. This humour pleased the Dr, and he went to the Gent and cured him.

John Aubrey (1626-97), *Brief Lives,* on William Butler (1535-1618)