the rate of gastrointestinal haemorrhage was found between two different doses of aspirin.¹³ In this study, aspirin was efficacious at a dose of 30 mg a day, but a threshold dose for either the therapeutic or adverse effects of aspirin has yet to be established, and further attempts at dosage reduction might compromise therapeutic efficacy before adverse effects are eliminated completely.

Insufficient evidence exists to support the view that modified release formulations are safer, in terms of gastrointestinal haemorrhage, than standard formulations. Here we have studied the effect of dose and formulation on the incidence of gastrointestinal haemorrhage only; it may be that other symptomatic gastrointestinal adverse effects, such as nausea and epigastric pain, can be significantly reduced.¹³

The incidence of gastrointestinal haemorrhage with aspirin is relatively low, and to avoid factors that could have led us to underestimate the risk, we set inclusion and exclusion criteria such that only trials of a certain quality, with adequate numbers and follow up, would be selected. Although there is some asymmetry in the funnel plot (see figure on *BMJ's* website), suggesting the possibility of selection bias, adjustment for the likely effect of bias using "trim and fill" gave a pooled odds ratio of 1.62, which is only a slight change from our estimate of 1.68.¹⁴ Our meta-analysis seems reasonably robust to the asymmetry observed in the funnel plot.

We believe that the findings of our study are relevant to everyday practice. No significant heterogeneity was found, even though the studies we analysed encompassed a broad selection of patients with varying clinical indications. All the trials excluded patients at increased risk of gastrointestinal haemorrhage or with aspirin intolerance, but this is consistent with current advice on the use of aspirin and does not invalidate the relevance of our findings. Nevertheless, aspirin is available over the counter, and the risk of gastrointestinal haemorrhage could be higher in patients who take it without consulting a doctor.

We thank Jon Deeks for encouragement and statistical support, particularly with the meta-regression; Alex Sutton for helping

with the funnel plot; and Jeff Aronson for help with the manuscript.

Contributors: YKL conceptualised the review, developed the protocol, provided clinical interpretation of the trials, abstracted data, and undertook most of the statistical analyses. SD contributed to the development of the protocol, abstracted data, and prepared the manuscript. Both authors will act as guarantors for the paper.

Funding: SD was supported by a grant from the Sir Jules Thorne Trust.

Competing interests: None declared.

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(Accepted 15 August 2000)

Wet combing versus traditional scalp inspection to detect head lice in schoolchildren: observational study

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Lice infestation is a problem in local communities, probably because reservoirs remain undetected. Wet combing (combing systematically through wet, well conditioned hair with a fine toothed comb) has been presented as a cheap, ecological, self sufficient, and feasible technique for diagnosis and treatment of head lice.¹⁻³ Compared with traditional scalp inspection it uses five elements to make living lice more visible, to better distinguish them from dandruff, and to assess the maturity of the infestation: water, conditioner, a fine toothed comb, a systematic sweep of the scalp, and a magnifying glass (10×). However, its efficacy as a

diagnostic tool and as a therapeutic intervention has not been proved; hence it is not evidence based.

Subjects, methods, and results

We did an observational study comparing detection of head lice using traditional scalp inspection and wet combing. After ethical approval had been obtained, all 260 pupils, aged 2-12 years, of a primary school in a socially deprived urban area in Ghent, Belgium, were invited for a screening test during a three day campaign to detect head lice in November and

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BMJ 2000;321:1187-8

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Traditional scalp inspection versus wet combing to detect head lice in schoolchildren

Classical scalp inspection	Wet combing		Total
	Not infected	Infected	
Not infected	161	17	178
Infected	14	32	46
Total	175	49	224

December 1999. We obtained informed consent from parents. All children at school during the screening period were inspected consecutively and independently by two teams of six trained screeners. The first team did traditional scalp inspection, the second team did wet combing. The results of the first screening team were not communicated to the children, the school staff, or the second screening team. All children found to have head lice by the wet combing technique were given a number of treatment options, which were to be given at home by parents. All children found to have head lice by either of the two methods were reinspected 14 days later.

Association between the results of the two screening techniques was obtained using the kappa statistic. The positive and negative predictive value of traditional scalp inspection (criterion validity) was estimated, using wet combing as the gold standard.⁴

We screened 224 children (99 (44%) were 2-5 years old and 92 (41%) were female). Forty nine children (22%) were found to have head lice with the wet combing method (of whom 17 (8%) had been found not to have lice using the traditional scalp inspection) and 175 (78%) were found not to have head lice (of whom 14 (6%) were said to have lice using the traditional inspection method) (table). These 14 children were reinspected after 15 days. One of them reported symptoms and was indeed infected. There were no spontaneous reports of infestation among children who were not found to have lice using either technique. Of the 49 children found to have head lice by wet combing (and treated using a variety of products or by combing), 53% no longer had lice at reinspection.

The point prevalence of lice measured with the wet combing method was 21.9% (95% confidence interval 16.5% to 27.3%). We found a poor association between the results of the two tests ($\kappa=0.59$, 0.46 to 0.72). Compared with wet combing, the positive predictive

value of the traditional scalp inspection method is 0.70 (0.54 to 0.82) and the negative predictive value is 0.90 (0.85 to 0.94).

Comment

Traditional scalp inspection is a poor technique for detecting head lice, as 30% of its "positive" results and 10% of its "negative" results are false (provided that wet combing is indeed the best method of detecting head lice). High values for false positives and false negatives call into question a test's screening efficiency, especially when the prevalence of the disease exceeds 1%.⁵ Too many lice-free children receive unnecessary treatment, and too many infestations escape detection, jeopardising the control of an epidemic. The gold standard character of wet combing for detection of head lice needs confirmation to legitimise the extra logistic effort of screening campaigns that use wet combing.

We thank the board of the participating school for allowing data collection, the members of the screening teams for their participation, and the children for their patience. We thank the project leaders of the health community centres of Ghent (L. Gijssels and C. Bracke) for their permission to integrate this study into their pilot project. B. Vincke gave secretarial assistance with data entry.

Contributors: JDeM designed the study, interpreted the data, and wrote the report. IB and FM supervised the training of the screening teams and the data collection. SW did the statistical analysis and helped write the report. RVS helped with interpreting the data and writing the report.

Funding: Funded by the participating community health centres and by the City of Ghent (SIF contract Action 42).

Competing interests: None declared.

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(Accepted 30 August 2000)

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