Finding polymorphonuclear leucocytes with many bacteria in the Gram stained conjunctival smear (group 3) correctly predicted the association with positive bacterial cultures in 20 of 27 cases (74%). Some of these organisms, such as *Staph aureus*, *Str pneumoniae*, and *Haemophilus* spp, were acknowledged pathogens in the eyes.

The presence of only an occasional polymorphonuclear leucocyte or its absence in the conjunctival smear from the babies in group 4 is important. The six babies in this group were referred to us by ophthalmologists after isolation of *C trachomatis* from the conjunctiva and local treatment with 1% chlortetracycline eye ointment for one to two weeks. Treatment was completed in our clinic with systemic erythromycin by mouth. If cultures for *C trachomatis* had not been taken when chlortetracycline was prescribed the diagnosis of this potentially systemic infection would have been missed. Negative cultures were also obtained in three babies with chlamydial ophthalmia neonatorum treated with chloramphenicol eye ointment.

Chlamydial ophthalmia may be associated with secondary bacterial infection which may be controlled by neomycin eye ointment, facilitating culture of *C trachomatis*. Lack of response to local treatment should prompt referral for full investigations to exclude chlamydial infection. Because chloramphenicol may suppress *C trachomatis* and possibly cause blood dyscrasia, it seems advisable that when gonorrhoea has been excluded bacterial ophthalmia should initially be treated with neomycin eye ointment, though it is inactive against streptococci. Treatment may be changed according to response and bacterial sensitivities. No local sensitivity to neomycin occurred in this study. Neomycin, chloramphenicol, and tetracycline may all suppress gonorrhoea.

In the four babies in group 5 the absence of polymorphonuclear leucocytes and negative culture results enabled ophthalmia neonatorum to be excluded with confidence.

This study suggests that the Gram stained smear is a useful and sensitive test with a high positive predictive value for identifying the aetiological agent of ophthalmia neonatorum. It may be useful in developing countries where more elaborate diagnostic tests are not available.

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SHORT REPORTS

Traditional Chinese acupuncture as an antiemetic

The problem of postoperative nausea and vomiting continues to confound anaesthetists, surgeons, and patients despite modern techniques and drugs.[1] Though the analgesic effect of acupuncture has been well studied, there have been few studies into an antiemetic effect. Dundee *et al* have recently shown an antiemetic effect of acupuncture at the P6 acupuncture locus (Nieguan),[2] which is a point recommended for the treatment of nausea in classical acupuncture and is located 2 cun (about 3 cm) from the distal palmar crease, at a depth of 1-2 cm. We undertook the present study to corroborate their findings.

Patients, methods, and results

Approval was obtained for the study from the hospital ethical committee, and written consent was given by all subjects. The investigation was designed as a double blind randomised trial. Consecutive patients scheduled for elective laparoscopy (for tubal ligation or diagnosis) were studied; one group received acupuncture at the P6 locus and the control group did not. The P6 acupuncture locus was identified and marked before operation; patients were allocated to each group by drawing a random number after inducing anaesthesia. All patients were anaesthetised by an identical technique; oral temazepam was given as premedication, and endotracheal anaesthesia was induced and maintained with thiopentone 5·0 mg/kg, 70% nitrous oxide, 0·5% isoflurane, oxygen, and morphine 0·1 mg/kg. Muscle relaxation was obtained with vecuronium 0·1 mg/kg and reversed with neostigmine and atropine.

Acupuncture was performed during surgery with a regular acupuncture needle, which was manually rotated 20 times each minute. After the operation the patients were not mobilised until the end of the study; metoclopramide 10 mg was prescribed and given intramuscularly at the discretion of the attending staff, who, like the subjects, were unaware if acupuncture had been used or not.

The occurrence of nausea and vomiting was assessed by interview at 30 minutes, 60 minutes, and six hours after surgery by an independent observer. The two groups were similar with regard to age of patients, nature and duration of surgery, and the number in each group requiring postoperative morphine. The table shows the prevalence of emetic events and the use of antiemetics during the six hours of the study. Twenty three (52%) of all the patients experienced nausea with or without vomiting, and 15 (34%) of all the subjects vomited. Acupuncture did not lead to a significant reduction in nausea or vomiting.

*Prevalence of nausea and vomiting, and use of antiemetics**

	Acupuncture (n=20)	No acupuncture (n=24)
0-1 Hours:		
Nausea	5	5
Nausea and vomiting	4	1
Required antiemetics	3	1
1-6 Hours:		
Nausea	11	12
Nausea and vomiting	9	6
Required antiemetics	3	3

*Differences between groups not significant at p=0·05 (Fisher's exact test).

Comment

The overall prevalence of nausea and vomiting in our study was similar to that reported after similar surgery[3] and underlines the magnitude of this "minor complication of anaesthesia." Randomised double blind trials of acupuncture are scarce, as it is difficult to blind both observer and subject to the treatment used[4]; in our study we avoided many of these difficulties by giving acupuncture under anaesthesia. It is not known if acupuncture under anaesthesia is effective in man, but there are several animal studies that show an analgesic effect of acupuncture given under anaesthesia.[5]

Our findings are in direct contrast with those of Dundee *et al.*[2] A much larger study, of more than 200 subjects, would be required to rule out even a minor antiemetic effect of acupuncture (that is, a 10% difference between the groups). We chose, however, to limit our study to 46 subjects, as our results suggested that acupuncture at the P6 locus, in the way that we used it, is unlikely to be a clinically useful prophylactic for postoperative nausea and vomiting.

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Facial flushing after intra-articular injection of steroid

Several systemic side effects of intra-articular injection of steroid have been described.[1-5] One of these is flushing, an unpleasant subjective sensation of warmth with erythema that affects the face and upper trunk. Whether it depends on sex, age, or disease has not been determined. Although it is generally considered to be a trivial complication[5] and has a reported frequency of less than 1%,[1] spontaneous complaints of flushing after injection of steroid from several patients led us to reassess the frequency and clinical importance of this reaction in a prospective study.

Patients, methods, and results

We studied 130 consecutive patients attending this unit who required intra-articular steroid injection of one knee. Before injection they were specifically questioned about vasomotor instability (perimenopausal flushing, flushing with alcohol, and easy blushing). Each knee was aspirated "to dryness" by a superolateral approach, and 40 mg triamcinolone acetonide was then injected under low resistance. The occurrence of nine possible adverse reactions, including flushing, in the seven days after injection was determined with a questionnaire provided at the time of the injection. Patients were not told that flushing was the primary interest. Between four and six weeks later they were seen again to clarify and confirm their answers. Patients who reported flushing and subsequently needed further intra-articular treatment of the same knee were injected with either triamcinolone acetonide 40 mg or triamcinolone hexacetonide 20 mg. Subsequent adverse reactions were assessed as before. Statistical comparison between the groups was made with the χ^2 test with Yates's continuity correction.

Assessment of reactions was not possible for 26 patients who lost or failed to complete the questionnaire or who gave inconsistent reports and for four others who responded positively to every question. All 30 were excluded from the analysis. The table shows the results for the remaining 100 patients, who had rheumatoid arthritis (36 patients), osteoarthritis (29), or pyrophosphate arthropathy (35). Flushing occurred in 40 and was serious in 15. It occurred at a mean interval of 19 (SEM 1·7; range 2-30) hours after injection and lasted for a mean of 36 (SEM 4; range 6-96) hours. It was associated with being female ($\chi^2=7·9$, $p<0·01$) but not with diagnostic category (rheumatoid arthritis $\chi^2=0·65$, $p>0·45$; osteoarthritis $\chi^2=0·24$, $p>0·45$; pyrophosphate arthropathy $\chi^2=0·41$, $p>0·45$), previous vasomotor instability ($\chi^2=0·19$, $p>0·45$), or age.

Twenty four patients who flushed needed a repeat injection in the same knee. All six who received triamcinolone acetonide reported flushing, whereas only nine of the 18 who received triamcinolone hexacetonide developed the reaction, which was reported to be less severe than before in all cases.

Details of patients studied

	Patients who flushed (n=40)	Patients who did not flush (n=60)	Total (n=100)
Mean (SEM) age in years and range	66 (1·7) 35-82	63 (1·7) 32-88	64 (1·2) 32-88
Ratio of men: women	1:3·4	1:1	1:2·2
No (%) of patients with:			
Rheumatoid arthritis	13 (33)	23 (38)	36 (36)
Osteoarthritis	11 (28)	18 (30)	29 (29)
Pyrophosphate arthropathy	16 (40)	19 (32)	35 (35)
No (%) with previous motor instability	6 (15)*	6 (10)*	12 (12)*

*All women.

Comment

Flushing was a common side effect of intra-articular steroid treatment, occurring in 40% of the documented patients (31% of the initial study group) and being unpleasant in 15% (12% of the initial group). The reaction was significantly more common in women ($p<0·01$) but seemed independent of age, disease category, or prior vasomotor instability. Previous underestimation of the frequency and severity of this response, particularly in women, is difficult to explain. Although in this study the patients were specifically questioned about nine side effects after the injection, the proportion who gave multiple positive responses was low. No other side effect was reported by as many as 40 patients, and the incidence of flushing was still high when all patients in the study were included (44/130; 34%). Every precaution was taken to ensure intra-articular rather than periarticular injection.

Flushing was reproducible within the small group of patients who were given a repeat injection of triamcinolone acetonide. Although not specifically designed to compare the frequency of side effects between different long acting steroids, the study suggested that the propensity to cause flushing may vary between different preparations. Whether the steroid, the side chain, or the vector is responsible for the flushing remains to be determined.

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Tropical spastic paraparesis associated with human T lymphotropic virus type I in an east African naturalised in Sweden

A slowly progressive myelopathy affecting the pyramidal tracts and to a minor extent other systems is known as tropical spastic paraparesis because of a characteristic geographical distribution.[1] Recent evidence suggests an aetiological role for the human T lymphotropic virus type I (HTLV-I) in this condition.[1,2] Though HTLV-I is widespread in Africa, tropical spastic paraparesis associated with this virus has been found in only one African patient, living in the Ivory Coast (west Africa).[3] We report a long record of antibodies to HTLV-I in an east African with tropical spastic paraparesis who had been resident in Sweden for 12 years.

Case report

A 31 year old Ethiopian had settled in Sweden in 1975. From the age of 16 he had had frequency and urgency of micturition and from the age of 21 he had