ty pharmacists; of the 90 who responded 24.4% estimated they were 'hardly ever consulted'.

It appears that the inclusion of a pharmacy within a health centre results in increased frequency of consultation. Where two professionals work so closely together each acquires an appreciation of the other's function, so that they work for their mutual benefit and ultimately that of the patient.

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Referral of women with chronic pelvic pain

Sir,

Chronic pelvic pain in women is one of the most difficult problems faced by general practitioners and gynaecologists. Although many gynaecologists feel that a gynaecological problem is unlikely in the majority of these cases, large numbers of investigations, including laparoscopies, continue to be performed. I have reviewed 200 cases of chronic pelvic pain of more than one year's duration referred to three teaching hospitals.

Apart from tenderness on abdominal and/or vaginal examinations clinical assessment failed to produce any positive findings in 142 cases (71%). In 38 patients (19%) vaginal discharge was noticed, ovarian cysts were felt in four (2%) and the uterus was enlarged in 14 (7%). Investigations were performed in 102 cases (51%). Positive results were obtained from cultures of high vaginal swabs and/or urine specimens in 38 cases (19%) — all were treated for infection, but only seven patients reported partial improvement in their pain and only two that the pain had gone completely. Twenty six patients (13%) were scanned — eight (4%) had ovarian cysts, 10 (5%) had an enlarged uterus and no abnormality was detected in the remaining eight (4%). Of the 174 patients (87%) who underwent laparoscopy, no abnormality was detected in 150. There was evidence of endometriosis in nine patients, pelvic inflammatory disease in five, adhesions from previous operations in eight, ovarian cysts in four and periappendicular adhesions in two. Only half of these positive laparoscopic findings were considered to be a possible cause for the pelvic pain. Of the 200 patients only 26 (13%) improved as a result of gynaecological treatment.

Gynaecological assessment failed to reach a diagnosis in the majority of the cases, in spite of the fact that 87% of the patients underwent laparoscopy. This suggests that chronic pelvic pain has a psychological rather than an organic origin in the vast majority of cases. Even those who support organic causes for pelvic pain admit that a substantial number of patients improve after a period of psychological counselling.[1,2]

Too many cases are referred to gynaecologists, too many laparoscopies are being performed and the possibility of a psychogenic origin for the pain is not adequately explored. The referral letters were too brief in 78% of the cases with no assessment of the patient's background. General practitioners are well placed to assess the psychological and social background of patients.

The majority of these patients are seen in the gynaecology clinic by junior or middle grade staff who worry about missing an organic cause for the pain. Thus, in many cases the gynaecological opinion is given by a hospital doctor who may be less experienced than the referring general practitioner. The decision to perform a laparoscopy should not be taken lightly, because the procedure has a definite morbidity and mortality.[3] Such an invasive procedure should not be the method used to differentiate between patients who have an organic or psychogenic cause for their pain. The financial cost of these unnecessary procedures and the burden on the waiting lists and hospital staff should also be considered. In 1974, over 10 000 laparoscopies were performed to investigate pelvic pain in 382 hospitals all over the UK.[3] Laparoscopy has become a more familiar operation, so the figure is probably now much higher.

Assessment of chronic pelvic pain in general practice should include a search for possible psychological factors as well as physical examination and bacteriological tests for urinary tract or pelvic infection. If a gynaecological cause is suspected, ultrasound scanning of the lower abdomen is a useful non-invasive investigation. Referring such patients to a gynaecology clinic without this assessment may result in patients undergoing an unnecessary procedure involving general anaesthesia. In the gynaecology clinic, these patients should be assessed by an experienced gynaecologist.

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Triglyceride screening in the surgery

Sir,

Despite earlier controversy, a raised triglyceride level is accepted as a coronary artery disease risk factor in its own right and its measurement is necessary to type the hyperlipidaemia. Fasting samples are not required for cholesterol concentrations and are necessary only in those with raised triglyceride values. Opportunistic screening for hyperlipoproteinaemia is appropriate in primary care[1] and target blood lipid concentrations for general practice have recently been published by the British Hyperlipidaemia Association.[2]

We use Reflotron test strips (Boehringer) to determine cholesterol and triglyceride levels in the surgery. The accuracy of the strips is monitored by the hospital laboratory and a quality assurance scheme for test-strip cholesterol has been organized by the Wolfson Research Laboratory, Birmingham. Good correlation between the surgery and the hospital laboratory for both analytes has been achieved.

The levels of triglyceride requiring intervention remain controversial and the risk for coronary events is probably not linear. Mild hypertriglyceridaemia (3.0–6.0 mM) is usually due to obesity or alcoholism and is associated with significant hypercoagulability.[3] Below 3.0 mM specific treatment is usually unnecessary. Levels above 5.0 mM[4] or 6.0 mM[2] require vigorous dietary control and sometimes drug therapy as there is also an increased risk of pancreatitis.

Of 215 patients screened opportunistically in the surgery, 14 (6.5%) had moderately or seriously raised triglyceride levels. Two patients had triglyceride levels above 5.0 mM, both of whom were seriously overweight, consumed excess alcohol and had cholesterol levels above 6.5 mM. There were 12 patients with triglyceride levels between 3.0 and 5.0 mM, eight of whom had cholesterol levels of less than 6.5 mM.

Four of these 12 patients had no predisposing factors such as obesity, alcohol or diabetes and three of these four were in the group with normal cholesterol levels. Therefore, testing only those with cholesterol levels above 6.5 mM or with risk factors for hypertriglyceridaemia would have missed three patients, that is 21% of those with hypertriglyceridaemia.

Therefore, if triglyceride is included in the practice screening programme all patients should be screened.

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Fatal pulmonary embolus in a patient treated with Marvelon

Sir,

We would like to report the case of a 16-year-old girl who developed pulmonary emboli and subsequently died while receiving the oral contraceptive Marvelon (desogestrel 150 μg, ethinyloestradiol 30 μg; Organon). She was referred with a possible deep venous thrombosis by a family practitioner. Two weeks previously she had suffered a sudden syncopal episode, and had thereafter been breathless, with intermittent sharp central chest pain, which was worse on inspiration. Her symptoms had not responded to antibacterial treatment. The day before admission her left calf had become swollen, hot and painful. She had previously been perfectly well, a non-smoker with no relevant family history. She had been taking Marvelon for two months, but had stopped when the antibacterial drugs were prescribed for her dyspnoea.

On examination, she was breathless at rest and cyanosed, with a tachycardia (110 beats per minute) and a normal blood pressure (110/70 mmHg). There was clinical evidence of right ventricular strain, but her chest was clear. There were signs of a left deep venous thrombosis, accompanied by tenderness in the left iliofemoral area. An electrocardiogram showed changes suggestive of pulmonary embolus, and arterial gases revealed hypoxia and hypocapnia. Chest radiography showed dilated proximal pulmonary arteries with abrupt cut off. A diagnosis of pulmonary emboli and iliofemoral vein thrombosis was made.

The girl was treated immediately with intravenous heparin according to the Llandough regimen.[1] A perfusion lung scan showed massive perfusion defects occupying almost all of the right lung and the apex and midzone of the left lung. The opinion from the regional cardiothoracic centre was that neither thrombolytic therapy nor embolectomy were appropriate because of the delay between the onset of symptoms and presentation. Her condition deteriorated suddenly and she died 72 hours after admission. Post-mortem examination confirmed death to be due to pulmonary emboli and left iliofemoral vein thrombosis.

We have been unable to find any published cases of pulmonary embolus associated with Marvelon, which came into common usage in the UK in 1982. The Committee on Safety of Medicines has received seven notifications (which include one death), and two of deep venous thrombosis (Committee on Safety of Medicines, personal communication).

The risk of thromboembolism associated with oral contraceptive agents is reduced but far from abolished in low-dose oestrogen preparations,[2,3] and their effects on haemostasis are well described, the oestrogen component causing the thrombogenic tendency by increasing levels of factors II, VII, VIII, IX and X, fibrinogen and soluble fibrin, and decreasing levels of antithrombin III.[4] Recently, however, it has been stressed that with certain low-dose preparations, the thrombogenic effects of the oestrogen may be countered by the ability of the accompanying progestogen, for example levonorgestrel, to increase fibrinolytic activity, decrease platelet activity, and possibly to increase antithrombin III levels.[5] Desogestrel does not have this ability[5] and in fact causes a small but statistically significant decrease in antithrombin III levels.[6]

While there are no data comparing the incidence of thromboembolic events associated with Marvelon and other oral contraceptive drugs, there are theoretical reasons to suggest that this newer drug is likely to carry a similar risk to other low-dose oestrogen preparations.

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Appointment system or open surgery?

Sir,

In their article on patients' satisfaction with access to general practitioners Allen and colleagues (April *Journal,* p.163) suggest that 'a mixed system may well be the ideal'.

We operate such a system in our practice which has a population of 8900 and an annual consultation rate of 2.9 per patient in 1987. We book 12 patients at 10-minute intervals from the start of surgery with a 30-minute gap after the first hour; 'extras' or patients who just turn up are seen during this time or after the last booked patient. We usually see between 18 and 24 patients in morning surgery which lasts between three and three and a half hours. Each patient is seen for a mean of nine minutes while mean waiting times are eight minutes for patients who booked appointments and 34 minutes for those who did not. I would commend this system to any practice with patients who will always just turn up or where the 'extras' are often the most disadvantaged patients who need adequate consultation time. This method allows such time to be given without delaying or penalizing those that do book appointments. It also seems to reduce the doctors' perception of being hurried, and works well if you have the stamina for a three and a half hour surgery.

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