pressure.¹ Mural thickness is assessed by measuring the distance from the echogenic mucosa to the outer oedematous wall that shows few echoes.⁹ There are no published criteria for the normal thickness of the wall. Ancillary findings may be an asymmetric thickening of the appendix wall, periappendiceal fluid or a soft tissue mass (abscess formation), and echoes within the lumen with or without acoustic shadowing, which can represent faeces, an appendicolith, or merely pus formation.⁹

A Japanese group separated appendicitis into three degrees of increasing severity, which it labelled catarrhal, phlegmonous, and gangrenous.¹⁵ It correlated widths of echo from the appendix and presence of fluid with these conditions, finding increasing appendix widths and increasingly constant presence of fluid with increasing severity of appendicitis. Most of the American and European studies give high sensitivity (80-89%) and specificity (94-100%) for high resolution ultrasonography in diagnosing acute appendicitis.^{1 9 10 16} The results of other studies have not, however, been as impressive, giving sensitivities as low as 58% and specificities as low as 86%.^{8 15} Takada *et al* showed that the sensitivity increased with the increasing severity of the acute appendicitis, being 100% in gangrenous and phlegmonous appendicitis but only 32% in catarrhal appendicitis.¹⁵ Puylaert *et al* have shown that the sensitivity of ultrasound is lower in detecting cases of perforated appendices (28%) than in acute cases without perforation (80.5%) or in those with an appendiceal mass (89%).⁸ They make the point that the low sensitivity in the group with perforated appendices was not necessarily worrying as the need for an operation was obvious.⁸

The rate of false negative results of high resolution ultrasonography in diagnosing acute appendicitis ranges from 3% to 25%,^{1 9 10 15} and in one study a normal appendix was visualised.¹⁰ The rate of false positive results ranges from none to 3%.^{1 9 10} Thus high resolution ultrasonography will graded compression has its limitations in diagnosing acute appendicitis, but it is better than other methods. One problem is that sometimes the caecum cannot be compressed so that the echo from the appendix cannot be sought.⁹ The other important limitation of ultrasonography is that it requires a skilled trained operator, and the logistics of

providing 24 hour radiologist cover for such an ultrasound service would be extremely complex. The provision of an ultrasonographic service by junior surgical staff is not viable for many reasons, not the least being the temporary nature of their posts.

The conclusion is that high resolution ultrasonography provides an accurate and specific test for acute appendicitis but has variable sensitivity. None the less, it is better than other forms of imaging and laboratory investigations. Ultrasonography also carries the potential advantage in women of detecting gynaecological causes for pain in the right iliac fossa and for this reason should be performed with a partially filled bladder. High resolution ultrasonography is thus indicated in those patients with equivocal findings, but its place in the routine diagnostic investigations for patients with pain in the right lower quadrant does not seem justified.

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Living with a stoma

Sexual and urinary problems are common

In 1947 Cuthbert Dukes thought that people were little handicapped by a colostomy, which did "not seem to be an insuperable barrier to sex life."¹ Counsell and Lockhart-Mummery lent support for those with ileostomies: "The presence of an ileostomy appeared to be no bar to normal sexual relations" and "the large majority led happy and useful lives."² But Brendan Devlin found that patients with colostomies had many problems and no advantages,³ since which similar results have also been reported for patients with ileostomies.⁴

Recently 189 people with an ileostomy or a colostomy were interviewed in their own homes and asked about their daily lives, particularly their domestic and marital life.⁵ Of the 94 patients with ileostomies, 49 were working and a quarter retired, whereas of the 95 patients with colostomies, 34 were working and 37 retired. The remainder were housewives, retired people with a job, and sick and disabled people. About two fifths of both groups had noticed some difficulty with household tasks, patients with colostomies being more

troubled than those with ileostomies. Although these difficulties were not caused only by old age, people over 40 and those living alone were most likely to experience problems. Shopping, gardening, washing, and ironing were most difficult, and home decorating was often said to be impossible. Indeed, in several homes there were bare walls, piles of equipment, and rolls of carpet, which had been awaiting attention for some time. Bending was difficult if the bag held any contents as a leak might occur, which could be annoying and embarrassing.

Most family members were not badly affected by a person's stoma, although affectionate hugs and greetings were likely to be more restrained. Patients with ileostomies were four times more likely than patients with colostomies to report improvement in their marriage, largely because they felt healthier: some who had been very sick found a new closeness with their partner. Patients with colostomies were less likely to continue to share a bedroom.

Roughly one third of the respondents were not having

sexual intercourse before their operations and had had none since. Of the remainder, many more of the patients with ileostomies reported an increase. None the less, half the patients with ileostomies and three quarters of the patients with colostomies reported impaired urinary or sexual function. Women's main problems were dryness of the vagina; discomfort during intercourse; dyspareunia; orgasmic dysfunction; and problems with contraception. Around a quarter had urinary difficulties (mainly patients with colostomies), over half of whom had severe problems. Of the men the main complaints were of perineal pain on intercourse; some loss of sexual drive; problems with erection (particularly with a colostomy); difficulties with penetration (again mostly patients with colostomies); ejaculation not being the same as before the operation; and orgasmic impairment. Urinary difficulties were experienced by a quarter of the men a quarter of whom reported severe problems. Unlike in women there was no difference in the incidence of urinary problems between patients with colostomies and patients with ileostomies. Fifty eight patients had reported their sexual or urinary problem, but only eight had been referred to a specialist. Most received no help, and many were not even given sympathy.

Most patients with a stoma will continue to be intermittently reviewed in hospital. When they are well and the stoma is long established the review may be yearly: doctors will establish that there has been no recurrence of disease and that there are no structural problems with the stoma—such as

prolapse, retraction, stenosis, or a parastomal hernia. Junior doctors may be unfamiliar with managing stomas and may leave problems with the appliance—soreness, odour, leakage, and so on—to the local stomatherapist. Patients usually accept this pattern of follow up: hospital doctors for the disease and the topography of the stoma and stomatherapists for the problems of skin care, diet, and collecting the effluent. It is often from stomatherapists and other patients that patients really learn to live with their stoma, but clearly their lives could be much improved. General practitioners have much to offer, as long as they are well informed, because they are sensitive, highly trained in interviewing skills, and willing to listen. Not only may they support emotionally and professionally (when there are genitourinary problems) but they may also mobilise help in the community to redecorate, iron, and shop.

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Heart disease in Asians in Britain

Commoner than in Europeans, but why?

About one million immigrants from the Indian subcontinent live in Britain. The clinical impression is that they present young with diffuse coronary artery disease, and this is supported by scientific investigation. In a survey of 3657 deaths of immigrants from the Indian subcontinent about a 20% excess was due to circulatory disease when compared with deaths in Europeans.^{1,2} The highest proportional mortality ratio for ischaemic heart disease was seen in Bengalis, who had an excess of 70%. Admissions to hospital of Indian Asians for myocardial infarction was similar or greater than those seen in Europeans of all ages.^{3,4} An excess of deaths from ischaemic heart disease has also been described in Indians compared with other ethnic groups and reported from other areas such as the West Indies, East Africa, and Singapore.⁵⁻⁸ These findings suggest that this problem is related not to the country of immigration but to shared environmental or genetic factors.

Analysis of coronary arteriographic findings show quantitatively more severe arterial disease in Asians than in Europeans.⁹ Although it is generally considered that there is more disease affecting the distal coronary arterial vessels, this was not the case in a study of 34 Asians undergoing coronary arteriography.⁹ This impression of diffuse distal coronary arterial disease may be related to the high prevalence of diabetes in Asians and not to a specific ethnic pattern.

Analysis of conventional risk factors in Asians suggests that hypertension, diet, and stress may be important as smoking is probably less common among Asian men and is rare among Asian women.¹⁰ But current risk factors cannot explain the excess rate of ischaemic heart disease found among Asians.

Hypertension is more common in Indian Asians than in Europeans, but this is unlikely to account for the differences in deaths from coronary artery disease.¹¹ Death from stroke is not more common among these immigrants, and African and West Indian immigrants have a much higher incidence of hypertension but a lower mortality from coronary artery disease. Diabetes is at least twice as common in Indian Asians as in Europeans,^{2,3} and this will enhance the premature development of atherosclerosis and mortality from coronary heart disease.

The total cholesterol and high density lipoprotein concentrations seen in Asian men are similar to those in British men, and the concentrations in Asian women are lower than in British women.^{10,12} The diet of Indians from the subcontinent is low in saturated fats, and they have a favourable ratio of polyunsaturated to saturated fat intake in the diet compared with that in the British population (0.85 v 0.28, respectively).^{12,13} One hypothesis forwarded for this discrepancy is that ghee, a clarified butter product prized in Indian cooking, contains cholesterol oxide (12.3% of sterols), which is not found in fresh butter; and in both animal and in vitro studies cholesterol oxides had angiotoxic and atherogenic properties.¹⁴ Also important in explaining the excess of heart disease in Asians may be low concentrations of n 3 polyunsaturated fats in the diet and the hypothyroidism that is widespread in Indian women.

Finally, it is uncertain how important stress is in causing coronary artery disease in any community, but the process of migration and the psychosocial difficulties immigrants have in adapting to cultural change have been implicated in the