secretory diarrhoea, diarrhoea associated with amyloidosis, and diabetic diarrhoea has been reported, but no controlled trials have been performed.¹⁵ The agents have no effect on the diarrhoea of cholera. Octreotide has shown some promise in the management of refractory diarrhoea related to AIDS, especially in patients without identifiable pathogens.¹⁶

After years of mostly uncontrolled studies, a series of randomised controlled trials is defining the clinical applications of octreotide.¹⁷ Nevertheless, analogues of somatostatin with special affinities for the different classes of somatostatin receptors are needed. Now that the sequences of many of the somatostatin receptor subtypes are being described,¹⁸ the synthesis of analogues targeted for specific clinical applications should be possible.

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Cancer in adolescence

Special problems; special solutions

The pattern of cancer among adolescents differs from that among young children, yet the common carcinomas of adulthood are still extremely rare in adolescents. The annual incidence of cancer among people aged 13-19 in Western countries is 140-150 per million, with around 700 new cases a year in Britain. The most common cancers, in order of frequency, are lymphomas, tumours of the central nervous system, acute leukaemias, bone and soft tissue sarcomas, germ cell tumours, malignant melanoma, and thyroid carcinoma. The incidence of Hodgkin's disease and bone sarcoma peaks in adolescence or early adulthood. Although the overall incidence of cancer in this age group is stable, testicular cancer, malignant melanoma, other skin cancer, and thyroid cancer have become more common since the 1970s, while ovarian cancer has become less common.¹

The aetiology of cancer in adolescents is poorly understood. A few cases arise as part of a genetic syndrome and even fewer can be attributed to established environmental risk factors (on the assumption that their aetiology is the same as that of similar cancers in children or adults).

The clinical needs of adolescents with cancer differ little from those of younger or older patients with similar cancers, and they therefore require multidisciplinary care. Many are treated in adult oncology departments and a few by paediatric oncologists. A diagnosis of cancer can be devastating for patients and their families at any age, but adapting to the effects of the disease and its treatment may be particularly hard for adolescents. They must cope with loss of personal control; changes in social relationships; prolonged absences

from school, college, or a first job; and uncertainty about the future—all at a time when they are beginning to establish an identity apart from the nuclear family but are still heavily dependent on it. Even if establishing a separate adolescent unit may not be possible, provision for the particular emotional, educational, and social needs of these patients could undoubtedly be improved. Britain's first adolescent oncology unit opened in 1990 at the Middlesex Hospital, London, and most of its patients receive treatment for bone sarcomas. The unit emphasises a team approach not only to clinical management but also to provide the best possible emotional and psychological support for the patients and their families and for the unit's staff.²

Survival from cancer in adolescence varies widely among diagnostic groups. Thyroid carcinoma has an excellent prognosis. The outlook for most patients with Hodgkin's disease and germ cell tumours is also good, largely because of the development of effective chemotherapy. Survival from bone sarcomas has improved, again with advances in chemotherapy, though even now possibly only half the patients with these tumours will enjoy long, disease free survival. This has happened concurrently with the increasing success of limb reconstructive surgery,³ which is justifiable on clinical and financial grounds, though its contribution to long term quality of life is not yet certain. For several types of cancer, notably sarcomas and germ cell tumours, the current aim is to maintain the high survival rate in subgroups with a good prognosis with less toxic treatment while intensifying treatment for those with poor prognostic features.

Higher survival rates have been associated with referral to specialist centres for a wide range of childhood cancers.⁴ The evidence relating to tumours occurring in adolescents but hardly ever in children is much sparser, though men with testicular teratoma may benefit from initial referral to a specialist centre.^{5,6}

Continuing specialist follow up is essential. Late effects occur, though they are rarely fatal and should be seen in the context of improved survival. They can affect virtually any system and mostly result from treatment rather than the cancer.⁷ Survivors need to be kept under surveillance and, when appropriate, given information on the risk of complications, especially impaired fertility, second cancers, and cardiovascular damage. Nevertheless, it should be emphasised that survivors are in general fit, employable, and in most respects indistinguishable from their peers.

The news about cancer in adolescents is therefore mainly good and should get better as a result of two recent initiatives. This month saw the first international conference on cancer and the adolescent, organised by the Yorkshire Regional

Cancer Organisation. It coincided with the launch of an appeal by the Teenage Cancer Trust aimed at improving facilities for adolescents with cancer. Together these initiatives should stimulate greater interest in a group whose welfare may have been neglected previously.

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Management of women with smears showing mild dyskaryosis

New studies justify immediate referral for colposcopy

Undoubtedly, women with smears showing severe dyskaryosis should have immediate colposcopy; many doctors believe that those with moderate dyskaryosis should be treated in the same way. But what to do about mild dyskaryosis is much less clear cut, and, indeed, the diagnosis is very subjective. According to the NHS cervical screening programme's guidelines, no justification exists for immediate colposcopy for mild dyskaryosis, but the programme wanted further research to determine whether cytological surveillance was as safe and effective as colposcopy.¹ Such research is being conducted prospectively by the Aberdeen birthright project and is reported in this week's journal (p 1399).²

The arguments in favour of immediate colposcopy are that it allows early assessment and diagnosis—useful, given the well documented association between mild cytological abnormalities and high grade cervical intraepithelial neoplasia.^{3,4} In this week's journal, Soutter and Fletcher report that women with mild dyskaryosis are at high risk of developing invasive cervical cancer (p 1421).⁵ Colposcopy should result in reassurance and should protect against the risk of the patient defaulting from cytological follow up. Disadvantages claimed for immediate colposcopy include the cost, which results in suboptimal use of the procedure. There is also a risk of overtreatment, which has increased with the widespread adoption of a "see and treat" policy after the introduction of large loop excision of the transformation zone.

The Aberdeen group addressed the issue of cost and the use of resources. It reported that only one in four smears obtained from women with mild dyskaryosis undergoing cytological surveillance reverted to normal with time and that most women with mild dyskaryosis eventually required colposcopy. In view of this and the need to take additional smears the group believed that a policy of cytological surveillance was likely to be more expensive and less efficient. This hypothesis is also supported by Johnson and colleagues, who used decision analysis to compare the expected mortality and cost associated

with immediate referral with those associated with cytological surveillance.⁶ The risk of ultimately developing invasive cancer was the same in both groups, but the cost was greater if a conservative policy (cytological surveillance) was adopted.

The other important findings in the paper from Aberdeen were that one third of women with cervical intraepithelial neoplasia grade III had an index smear showing mild dyskaryosis and that one in eight women defaulted from follow up. A previous paper has highlighted the risk of defaulting,⁷ and in this week's journal Macgregor and colleagues highlight the increased risk of invasive cervical cancer in women who are screened inadequately, or not at all (p 1407).⁸ Research to identify those women with mild dyskaryosis who may harbour high grade disease has focused mainly on the expression of human papillomavirus types,⁹ although a recent paper reported a strong association between such lesions and smoking.¹⁰ Should women with smears showing mild dyskaryosis therefore be selectively referred?

The remaining potential disadvantage of immediate referral is the risk of overtreatment. The advantages and disadvantages of a see and treat policy are illustrated in the short report by Downey *et al* in this week's journal in a population at high risk of defaulting (p 1412).¹¹ Although large loop excision of the transformation zone is safe and effective,¹² one should aim to avoid unnecessary treatment. Risk factors for overtreatment with large loop excision at the first attendance for colposcopy include minor cytological abnormalities,¹³ and caution should be exercised in patients with such abnormalities. But I believe that this risk is not an argument favouring cytological surveillance in patients with mild dyskaryosis—rather, an indication for a more complete colposcopic assessment before treatment, including punch biopsy of any lesion.

The time has come to review the recommendations for managing women in whom a smear shows mild dyskaryosis. A