

Repeat dispensing pathfinder sites announced; remuneration not agreed

THIRTY proposed pathfinder sites for pharmacy-based National Health Service repeat dispensing have been named by the Department of Health. However, the Pharmaceutical Services Negotiating Committee is still advising contractors not to make any binding commitments because there is not yet enough money on the table to pay for a proper, professional, service.

David Lammy, the Parliamentary Under-Secretary of State for Health who has responsibility for pharmacy, said that he was pleased to announce the locations although regulations were still to be put in place and negotiations were ongoing with the PSNC. The Department of Health intends to have NHS repeat dispensing throughout England by 2004.

Sue Sharpe, chief executive of the PSNC, has repeated her warning to pharmacy contractors not to sign up for a new service without knowing what they are getting into. "The Department is currently offering a flat-rate fee per pharmacy which amounts to no more than 5p per patient per month on top of the standard dispensing fee," she said. "I am concerned that they are developing a service right from the start that

does not operate at an acceptable professional level. It is a real worry that the Department's perception seems to be of a minimalist service. We do not believe that this meets the Government's quality agenda and will not be acceptable to patients or to the profession."

It seems that the Department's view is that pharmacists' level of input will amount to little more than filing and retrieving prescriptions and referring patients back to the prescriber if they have any queries or problems with their treatment.

"If we do not develop a tolerable level of professional input right from the start then we do nothing to enhance the quality of service to patients," Mrs Sharpe said. "Pharmacists will be taking on a very significant level of responsibility." The PSNC is continuing to encourage pharmacists to make expressions of interest in providing a repeat dispensing service.

Mrs Sharpe gave this stark warning: "If pharmacists accept this role when the Government has not offered proper funding, they are signing themselves up for an additional level of service equivalent to the introduction of monitored dosage systems, on



Sue Sharpe: Department sees repeat dispensing as no more than retrieving paper

which many nursing homes are now dependent, and for which there has never been any funding provided. If pharmacists agree to a payment which is not enough at the outset, then that is the point from which we will have to negotiate increases in the future."

The 30 pathfinder primary care trusts

The 30 primary care trusts which are to be pathfinder sites for pharmacy-based repeat dispensing are:

Bristol North with Bristol South and West
Cheltenham and Tewkesbury
North Hertfordshire and Stevenage
Eastern Birmingham
North Birmingham
Durham and Chester-le-Street
Durham Dales
Burnley, Pendle and Rossendale
Preston
Taunton Deane

Portsmouth City
Blackburn with Darwen
Charnwood and North West
Leicestershire
Bebington and West Wirral with Birkenhead and Wallesey
Great Yarmouth
Suffolk Coastal
Newham
Gateshead
Northumberland

Central Cornwall
Bromley
Sheffield West
South East Sheffield
East Elmbridge and Mid Surrey
Western Sussex
Newbury and Community
Amber Valley
Erewash
Coventry
East Leeds

Cancer survival estimates too low

CONVENTIONAL estimates for life expectancy after cancer diagnosis have been too pessimistic, say researchers (*Lancet* 2002;360:1131). Hermann Brenner from the German centre for research on ageing in Heidelberg, used two different methods to quantify survival estimates using data from the United States population based cancer registries.

The conventional cohort method (based on the survival experience of cancer patients whose diagnosis occurred many years ago) resulted in estimates that were between 1 per cent and 11 per cent lower than those quantified using period analysis (which uses survival data from a specific time period).

Scottish heart and stroke plan launched

SCOTLAND'S first strategy to combat heart disease and stroke has set a target to halve deaths from coronary heart disease (CHD) and stroke among Scots aged under 75 years by 2010.

In addition, it says every health board should have a locally managed clinical network for CHD and stroke by April 2004, and that a national register for these diseases will be established by the end of 2005. Clinical pharmacy leaders will be appointed by the Scottish Executive Health Department in 2004, to support the extension of pharmaceutical care in CHD and stroke.

An extra £40m from the Scottish Executive's budget has been ring-fenced to help fund implementation of the new strategy, which was unveiled last week. Some of the

money will be used to provide more specialist stroke units, to help reduce waiting times for angiography and surgery or angioplasty, and for staff training. Launching the strategy,

First Minister Jack McConnell said: "We will bring a new focus to giving children a healthy start in life and encourage a lifetime of healthy habits as part of our health improvement programme.

"The emphasis on prevention and treatment in this strategy sets the tone for the White Paper on health reform, which we will publish this winter."

"Coronary heart disease and stroke: strategy for Scotland" can be found on the internet via the *Pfj Online* links page (www.pfjonline.com/links).

Supervisors of the health professions must have no record of misconduct

RULES governing the appointment of members of the Council for the Regulation of Health Care Professionals (CRHCP) preclude the appointment of anyone who has ever been guilty of professional misconduct.

This suggests that the Government is taking a tough stance on who is and who is not suitable to rule on regulatory matters and may have implications for the membership of the councils of regulatory bodies themselves. In the past, the Royal Pharmaceutical Society's Council has included members who have been found by the Society's Statutory Committee to be guilty of misconduct sufficient to make them unfit to be on the Register of Pharmaceutical Chemists. One was subsequently appointed by the Council as a member of the Statutory Committee itself.

The new Regulations preclude the appointment of members of any profession, not just the health professions, who has been ruled against by any professional licensing body anywhere in the world and

would encompass lay members. They also preclude the appointment of anyone who is under investigation anywhere in the world where the outcome has not been finalised.

Further, the instigation of an investigation into the conduct of any sitting member of the CHRCP will lead to that member's immediate suspension from the council. An adverse ruling would lead to that member being removed from the council.

Regulatory bodies, such as the Society, and the general medical, dental and optical councils, currently do not disbar potential council members who have adverse professional disciplinary records. Nor do they have provisions for suspension from membership if any investigations are carried out.

Christine Gray, project manager for the Society's modernisation process, said that these were issues that the Society's Council would have to consider, probably at its December meeting.

The General Dental Council said that candidates for election to its council had to

declare any adverse decisions that had affected their registration status at any time and that ballot papers showed these details for each candidate. The General Optical Council does not disqualify people who have adverse professional rulings from membership, but the constitution of the council and its committees is under review.

Because the General Medical Council is a charity, people who are disqualified from acting as charity trustees are disqualified from membership. This covers undischarged bankrupts, disqualified company directors, people convicted of offences involving dishonesty or deception (unless the conviction is spent) and previously disqualified charity trustees. The council is soon to require candidates for election to disclose adverse GMC findings and overseas criminal convictions.

The Council for the Regulation of Health Care Professionals (Appointment, etc) Regulations 2002, SI 2002 No 2376. HM Stationery Office, ISBN 0 11 042821 8, price £2.

NOS primary care osteoporosis strategy published

THE role that pharmacists and other primary care staff can play in preventing osteoporotic fractures and falls has been outlined in a new National Osteoporosis Society strategy document.

The "Primary care strategy for osteoporosis and falls" says pharmacists can ensure that patients understand their medicines and can encourage them to adhere to treatment regimens. Pharmacists can also offer advice opportunistically on bone health, to people of all ages and not just the elderly.

The strategy grades the effectiveness of current interventions used to prevent or reduce post-menopausal bone loss, and those used in post-menopausal osteoporotic women. It recommends that all patients starting therapy should be receive counselling on lifestyle measures to reduce bone loss. In addition, seven priorities for action are outlined, with the aim of helping primary care organisations achieve standard six

of the National Service Framework for Older People.

These include using a case-finding approach to identify those most at risk of osteoporosis, identifying lead clinicians to implement the strategy, and establishing local osteoporosis interest groups. Both the chief medical officer for England, Sir Liam Donaldson, and the national director of older people's services, Professor Ian Philp, have endorsed the document. Professor Philp said: "The NOS strategy uses an evidence-based approach and links to national priorities, making it a wonderful example of joined-up thinking."

BPC reports, p534

Pharmacists can help drug misusers benefit from integrated care

THE role of community and hospital pharmacists in the integrated care of drug misusers has been highlighted in a new Scottish Executive report.

The report, entitled "Integrated care for drug users: principles and practice", says pharmacists can and do provide a whole range of services to drug misusers. These include needle exchange, dispensing and supervision of methadone, dispensing other medicines used in the treatment of drug misuse and referring people to the appropriate

agencies. In addition, they can advise on safe handling and storage of medicines and promote safe sex and a healthy lifestyle.

The report, which was launched by Health Minister Malcolm Chisholm last week, aims to improve the assessment of drug misusers' needs and their accessibility to services, as well as the co-ordination and planning of these services. It identifies areas where different parts of the health service and other agencies can work together in partnership to achieve better results. Mr

Chisholm said he hoped the report would provide the basis for future collaborative working between all those involved in the care of drug misusers. He added: "The evidence in this document strongly suggests that a long-term and sustained recovery from drug misuse is more likely if other problems are tackled at the same time, not simply the drug misuse problem."

A web link to "Integrated care for drug users" can be found on the *Pfj Online* links page (www.pjonline.com/links).

Skill mix proposals may weaken the medicines safety net, warns the NPA

A WARNING that proposals in the Department of Health's pharmacy workforce discussion document could reduce patient safety has been voiced by the National Pharmaceutical Association.

At their September meeting, members of the NPA management board said that allowing accredited pharmacy technicians to dispense and supply medicines without pharmacist supervision could weaken the vital safety net currently provided.

NPA chairman Terry Hannawin has urged NPA members to get involved in the skill mix debate. "Community pharmacists must read the document (*PJ*, 5 October, p469) and enter the debate. The Government is suggesting that the pharmacy supervision framework is outdated and is a major constraint on the development of extended pharmacy services. As a result it proposes to overhaul the whole system with schemes, such as personal medicines supply schemes, which will change the face of the pharmacy profession as we know it," he said.

Board members agreed that most of the document made sound sense and that the future lies in focusing on patients and providing more interaction and advice. They believe that pharmacists will need to give serious consideration to the skill mix in pharmacy with a view to reconfiguring the way that tasks are currently carried out.

Other matters considered at the NPA board's September meeting are reported below.

PIL proposals rejected Board members believed that proposals to allow community pharmacists to photocopy patient information leaflets (PILs) are unworkable (*PJ*, 10



Skill mix proposals may change the roles of pharmacists and technicians radically

August, p181). They said that the one obvious option missing from the proposals was to create a regulatory framework to allow the dispensing of medicines in patient packs.

Co-opted multiple members Tricia Kennerley (Moss Pharmacy) and Andy Murdock (Lloydspharmacy) have been co-opted to the NPA board to represent their companies. As a result, an election will be held to fill the elected seat previously held by Mr Murdoch.

Medicines reclassifications Board members decided to support the proposed reclassification of Grisol (1 per cent griseofulvin spray) as a pharmacy medicine (*PJ*, 24 August, p238). They also decided to oppose the transfer of Hc45 bite and sting relief cream (1 per cent hydrocortisone) to the general sale list category.

The NPA board believes that the public interest is best served if all non-prescription medicines are available only from pharmacies.

MeReC — statins, HRT and etanercept

THE Heart Protection Study (*PJ*, 6 July, p4) supports the practice of targeting patients based on their absolute risk of suffering a cardiovascular event and indicates that statins should be an option for all high-risk patients, the latest issue of *MeReC Extra* states.

However, it adds that it would be premature for primary care organisations to make sweeping changes to national service framework-driven policies for identifying, treating and following up high-risk patients.

The issue also looks at the implications of the Women's Health Initiative Study (*PJ*, 13 July, p43) and a change to the licensed indications of etanercept (Enbrel) (*PJ*, 22 June, p869). A copy is included with this week's issue of *The Journal* sent to community and hospital pharmacists in England and Wales. It is also available on the National Prescribing Centre's websites (www.npc.co.uk and www.npc.nps.nhs.uk).

Conflict between concordance and NSFs to be research subject

RESEARCH at the University of Leeds is to examine the potential conflict between partnership in medicine taking (concordance) and top-down prescribing pressures.

Josie Hackwood, a PhD student who was previously prescribing adviser at Leeds West Primary Care Trust, said that there are tensions inherent in encouraging patient-led decision making alongside the introduction of national service frameworks and guidance from the National Institute for Clinical Excellence. As a prescribing adviser she had seen strong promotion of the prescribing of statins to general practitioners when it was clear that the patients concerned did not want to take them and were unlikely to continue to do so.

Professor Theo Raynor, of the Leeds University pharmacy practice and medicines management group, said that NSFs and NICE guidance encourage uniformity

in prescribing, but that a central tenet of concordance is that patients should have the final say. Both are Department of Health priorities but appear to be mutually incompatible — one approach seeks to standardise prescribing and the other seeks an individual patient-centred approach and flexibility.

BRIEFLY

GP practice teacher-practitioner

Liverpool John Moores University and South Sefton Primary Care Trust, a teaching PCT, want to appoint a clinical tutor/teacher-practitioner who will also work as a support pharmacist in general practitioner surgeries (see pA18).

Government rejects calls for major changes to the NICE appeals system

CALLS from the House of Commons Health Select Committee and the pharmaceutical industry for changes to the National Institute for Clinical Excellence's appeals procedure have been largely rejected by the Government.

The one concession that has been made is that the NICE chairman, currently Sir Michael Rawlins, will no longer decide whether appeals against NICE decisions should be heard as well as chair the appeal committee.

The Government's response to a recent health committee report on the institute (*P7*, 13 July, p44), rejects the suggestion that the NICE chairman should be disqualified from chairing, or even sitting on, an appeals committee but accepts that the chairman and any non-executive board members

should continue to be barred from chairing appeals where they have been involved in the pre-appeal process.

The Government response says: "To set up an appeals procedure which is completely separate from NICE carries the risk of substituting one set of experts for another, thereby undermining the NICE process."

Also rejected is a call for greater transparency. The Government says that confidential information should be kept to a minimum but argues that companies supply market-sensitive information, and academics present information that could prejudice future peer-reviewed publication of their work if it were made public by NICE. The health committee wanted all information presented to NICE to be made public.



The Government says Sir Michael Rawlins will no longer be able to both decide if appeals should be heard by NICE and also chair them

Long-term, high-dose rofecoxib should be avoided

PATIENTS who start rofecoxib (Vioxx) treatment at a high dose (>25mg daily) could be at almost twice the risk of serious coronary heart disease (CHD) compared with patients who do not use non-steroidal anti-inflammatory drugs, say American researchers (*Lancet* 2002;360:1071).

Professor Wayne Ray of the Vanderbilt University School of Medicine, Nashville, Tennessee, and colleagues assessed occurrence of serious CHD in over 200,000 non-users of NSAIDs and in over 24,000 users of rofecoxib and over 150,000 users of other NSAIDs. They found that individuals treated with high-dose rofecoxib were 1.70 times (95 per cent confidence interval 0.98–2.95, $P=0.058$) more likely to have CHD than non-users of NSAIDs and 1.78

times (0.99–3.21, $P=0.056$) more likely to have CHD than individuals treated with celecoxib (Celebrex). These rates increased to 1.93 (1.09–3.43, $P=0.024$) and 2.20 (1.17–4.10, $P=0.014$), respectively, among new users.

The researchers found no evidence of increased risk among users of other NSAIDs or among those treated with rofecoxib at doses of 25mg daily or less.

They comment that the study has limitations, most notably that individuals taking rofecoxib could have differed from non-users of NSAIDs in their risk of serious CHD. However, the excess risk for high-dose rofecoxib persisted when a comparison was made with users of celecoxib, whose baseline characteristics were similar to those

for users of rofecoxib. "Our data . . . raise serious doubts about the cardiovascular safety of [rofecoxib] at doses greater than 25mg," they conclude.

A spokeswoman for Merck Sharp & Dohme told *The Journal* that the company's own analyses of these data do not support the authors' conclusions. "It is important to consider the conclusions of this single observational analysis within the context of what is known about the cardiovascular safety profile of rofecoxib," she said.

She added that prospective studies comparing the incidence of serious cardiovascular events occurring in patients receiving rofecoxib with those taking NSAID comparators or placebo have not been performed.

Memantine launched for treatment of Alzheimer's

MEMANTINE (Ebixa) — an N-methyl-D-aspartate (NMDA) receptor antagonist launched this week in the United Kingdom — continues to provide benefits to patients with Alzheimer's disease (AD) after one year, researchers report.

An American study of 252 patients with severe AD showed that 29 per cent of those given memantine (20mg/daily for 28 weeks) achieved improvement or stabilisation in global response, their ability to perform daily activities or their cognition, compared with only one in ten of those randomised to placebo (10 per cent; $P=0.0004$).

The improvements continued for at least 12 months in an open-label extension of the study, and carers needed to spend less time with patients treated with memantine.

Meanwhile, a European study of 166 patients with moderately-severe to severe dementia (AD and vascular dementia)

showed that twice as many patients treated with memantine achieved significant improvement or stabilisation in global response, function and behaviour, as those randomised to placebo (61.3 per cent versus 31.6 per cent; $P=0.0008$).

Both studies were presented at the Congress of the European College of Neuropsychopharmacology in Barcelona earlier this week.

Dr David Wilkinson, consultant in old age psychiatry, Moorgreen Hospital, Southampton, commented: "Studies with memantine suggest that it achieves meaningful improvements in cognition and function in patients with severe Alzheimer's disease. There is emerging evidence that the drug may be neuroprotective. Studies in patients with mild cognitive impairment are underway to see if memantine can prevent the progression of AD in the early stages."

He estimated memantine therapy would cost £72 per month. "It is not at all expensive if treatment makes a difference to patients with this debilitating disease and reduces the burden on carers," he added.

BRIEFLY

Patients want records protected

Members of the public would only consent to the computerisation of their medical records if the health service produced a clear patient agreement detailing how the information would be used, according to a Consumers' Association survey (*Health Which* 2002;October:16). The Government has pledged to make all records electronic by March 2005.

Cisplatin-based chemotherapy should be first-line treatment for lung cancer

PATIENTS with lung cancer who are treated with cisplatin and paclitaxel have better survival rates than patients treated with carboplatin and paclitaxel, results of a European trial suggest. And, because carboplatin-based therapy offers no advantage in terms of tolerance or quality of life, cisplatin-based chemotherapy should be the first treatment option, the investigators say (*Annals of Oncology* 2002;13:1539).

Dr Rafael Rosell, from the Hospital Germans Trias i Pujol in Barcelona, and colleagues randomised 618 patients with advanced non-small-cell lung cancer (NSCLC) to receive one of two treatments (see Panel). They found that response rates for the two groups were similar — 28 per cent in the cisplatin/paclitaxel group and 25 per cent in the carboplatin/paclitaxel group ($P=0.45$) — but that the group of patients treated with cisplatin had a better median survival (9.8 months compared with 8.5

months). The one-year survival rate was 38 per cent in the cisplatin/paclitaxel group compared with 33 per cent in the carboplatin/paclitaxel group and the two-year survival rates were 15 per cent and 9 per cent, respectively.

Dr Rosell said: “This large European randomised study can contribute greatly to resolving the long-standing debate on the superiority of carboplatin- or cisplatin-based chemotherapy in lung cancer. Although paclitaxel/carboplatin yielded a similar response rate, the significantly longer median survival obtained with paclitaxel/cisplatin indicates that cisplatin-based chemotherapy should be the first treatment option.” However, the researchers stress that paclitaxel/carboplatin is still a viable alternative “with a similar response rate, a good safety profile, manageable toxicity and superior ease of administration”.

The researchers point out that cisplatin tends to be the preferred standard chemotherapy for lung cancer in Europe, but that in the US carboplatin is normally used. They also comment that their findings need to be treated with caution because previous studies have shown no survival benefit for cisplatin over carboplatin.

In an accompanying editorial (*ibid*, p1515), Dr Thierry Le Chevalier of the Institut Gustave Roussy, France, says differ-

ences between the findings of European and US trials could be related to differences in dosage and the infusion time of the cisplatin combination or possible differences in population characteristics.

However, he concludes that if NSCLC survival is to improve new approaches to treatment are needed. “We have reached the therapeutic ceiling in NSCLC with standard chemotherapy whether it is cisplatin based or not,” he adds.

Evidence that ACE inhibition is affected by aspirin is weak

CONCOMITANT use of aspirin and angiotensin-converting enzyme (ACE) inhibitors should be considered in all patients at high risk of major vascular events, say researchers (*Lancet* 2002;360:1037).

Previous research has suggested that ACE inhibitors may be less effective in patients who also receive aspirin for the treatment of cardiovascular disease.

Professor Koon Teo of McMaster University, Hamilton, Canada, and colleagues systematically reviewed data from six long-term randomised trials of ACE inhibitors involving around 22,000 patients.

With the exception of one trial, the efficacy of ACE inhibitors was not found to be altered, either positively or negatively, among patients who were also receiving aspirin. Overall, ACE inhibitor therapy reduced the risk of the major clinical outcomes by 22 per cent ($P<0.0001$). The reductions in risk were clear for both those patients receiving aspirin at the start of the trials and those who were not, the researchers add.

“Even though results from the present analyses cannot rule out the possibility of some sort of interaction, they show unequivocally that, even if aspirin is given, the addition of ACE inhibitor therapy produced substantial additional benefit in all major vascular outcomes. Therefore, in the absence of clear contraindications, concomitant use of aspirin and ACE inhibitors should be considered in all patients at high risk of major vascular events,” the researchers conclude.

Treatment regimens used

Of the 618 patients enrolled in the trial, 309 patients were allocated to receive:

- 1 Paclitaxel (200mg/m² over three hours) and cisplatin (80mg/m²) every 21 days

and 309 patients were allocated to receive:

- 1 Paclitaxel (200mg/m² over three hours) and carboplatin (AUC 6) every 21 days

Tacrolimus ointment better than topical steroids in atopic dermatitis

TACROLIMUS ointment (Protopic), a topical immunomodulator, changes the course of moderate to severe atopic dermatitis by reducing the severity and frequency of flare-ups, according to a long-term trial reported earlier this month at the 11th Congress of the European Academy of Dermatology and Venereology in Prague.

The open-label study followed 316 adult patients with moderate to severe atopic dermatitis being treated with tacrolimus ointment (0.1 per cent twice daily) over a period of six to 12 months. Substantial improvement was achieved in 70 per cent of patients for longer than half the study period. Nearly 90 per cent (104/116) of patients treated for one year remained free of flare-ups, defined as withdrawing from the study due to lack of treatment effi-

cacy or an exacerbation of their disease requiring corticosteroid treatment. In the 12 patients suffering flare-ups, three required corticosteroids and nine withdrew from the trial due to lack of efficacy.

Dr Malcolm Rustin, consultant dermatologist, Royal Free Hospital, London, said: “Tacrolimus ointment represents a significant advance from the topical corticosteroids that have been our only option in atopic dermatitis for so long.”

He added: “The problem with topical steroids is that the potential for serious side-effects, such as skin atrophy, restricts their use to short-term treatment. Topical tacrolimus provides a steroid-free option which combines good efficacy with improved safety. It offers the potential for modifying the long-term course of atopic dermatitis.”

Breast cancer risk higher for teenage smokers

WOMEN who smoke in their teens increase their risk of developing breast cancer later in life, Canadian researchers suggest.

They investigated smoking and medical history in over 1,000 women with breast cancer and a similar number who did not have the disease. They found that premenopausal, parous women who had started smoking within five years of the onset of menstruation, were 70 per cent more likely to develop breast cancer, compared with parous non-smokers ($P=0.01$). In addition, nulliparous, premenopausal women who smoked more than 20 cigarettes a day were seven times more at risk of breast cancer than nulliparous, premenopausal non-smokers ($P=0.009$). The research is published in *The Lancet* (2002;360:1044).

However, cigarette smoking was not associated with an increased risk of breast cancer in post-menopausal women. Indeed, those whose body mass index had increased to more than 21 after they were 18 years old, actually halved their risk of breast cancer if they had started smoking after their first pregnancy ($P=0.02$).

The researchers say their results suggest that human breast tissue is most sensitive to carcinogens during periods of rapid cell proliferation when differentiation is incomplete, as in puberty, or when complete differentiation is never achieved, as occurs in nulliparous women.

Lead author, Dr Pierre Band, of the University of Ottawa, said: "These results add epidemiological evidence to experimental studies, relating susceptibility to carcinogenesis to the biology of breast development. Our observations reinforce

the importance of smoking prevention, especially in early adolescence."

Dr Stephen Duffy, of Cancer Research UK's mathematics, statistics and epidemiology department, commented: "This study suggests an increased risk of breast cancer for women who smoke in their teens and a decreased risk of the disease for women who take up smoking later in life, after their first pregnancy. Both of these could be chance findings since the study is relatively small. The picture remains confusing and we need further research to clarify the effects of smoking on breast cancer risk."

Medicines not to blame for smaller brain size of children with ADHD

THE smaller brain size of children with attention-deficit hyperactivity disorder (ADHD) is not caused by drug treatment, a new study suggests.

Researchers from New York University's child study centre used magnetic resonance imaging techniques to confirm that the brains of children with ADHD tend to be smaller than the brains of children without the disorder. They scanned the brains of 152 children with ADHD and 139 controls up to four times over a decade and found the cerebellum in the affected children was on average 6 per cent smaller.

Most of the children with ADHD were treated with stimulant drugs, but 49 of the children had never been treated. The researchers note that the reduced brain size seen among ADHD-affected children was as striking in those patients who were not treated with medicines as those who were. "Our study should provide a certain amount

of reassurance that medications aren't reducing brain size in children with ADHD," Dr F. Xavier Castellanos, one of the study authors said (*JAMA* 2002;288:1740).

Malaria parasite genome cracked

The complete genomic sequence for *Plasmodium falciparum*, the parasite that causes malaria in humans, has been published this month (*Nature* 2002;419:498).

In addition, the genetic code of the mosquito responsible for delivering the parasite from host to host, *Anopheles gambiae*, has been sequenced (*Science* 2002;298:129).

Scientists hope these discoveries will accelerate the search for drugs that can combat malaria.

BRIEFLY

Under-age sex and STI risk

Girls under 16 years of age attending a London genitourinary clinic with a suspected sexually transmitted infection (STI) were found to be three times more likely to have an STI compared with other women (*Sexually Transmitted Infections* 2002;78:349). Researchers analysed the profile of attendees at the clinic over two separate months and found almost two-thirds of girls aged 12–16 years had an STI and were three times more likely to have gonorrhoea and chlamydia compared with other female clinic users.

SIDS risk confirmed

Sleeping on the stomach increases the risk of sudden infant death syndrome (SIDS), American researchers have confirmed (*Pediatrics* 2002;110:772). The case-control study involved 260 infants up to one year old who died of SIDS over a three-year period. Researchers found those sleeping on their stomachs were four times more likely to die of SIDS, after adjusting for confounding factors (95 per cent confidence interval 1.8–8.8), compared with infants who slept on their sides or backs.

Paracetamol poisoning

Using a mouse bred to lack constitutive androstane receptors (CAR), researchers have shown that this protein is critical to the toxicity of paracetamol. "We found out that high doses of paracetamol activate CAR, and that CAR then activates target genes that increase toxicity," said Dr David Moore, Baylor College of Medicine, Houston, Texas. He added that blocking CAR would provide a different approach to treating paracetamol toxicity. The study is published in this week's issue of *Science*.

Lloyds launches CD-ROM

Lloydspharmacy has launched a continuing professional development CD-ROM for its pharmacists. The CD-ROM helps users prioritise learning activities and users will also be able to share their ideas for development with others. The CD-ROM was developed in consultation with the Royal Pharmaceutical Society and fulfills the Society's expectations for CPD.

Exercise slows functional decline

Exercise can reduce the progression of functional decline among physically frail, older people, say researchers. They randomly assigned 188 people aged 75 years and over to six months of home-based exercise or an educational programme. Disability scores in the exercise and education groups were 2.0 and 3.6 after seven months ($P=0.008$), respectively, and 2.7 and 4.2 after a year ($P=0.02$) (*New England Journal of Medicine* 2002;347:1068).