CORRECTIONS & UPDATES

19 February 2011

Panel 2 (page 454) in the “Giving advice on short-acting contraception” article is no longer valid. The correct information is in the hormonal contraception article, attached to this PDF.

Opposite panel 2 is a paragraph that begins “Potent enzyme inducers significantly...”; in the second sentence “griseofulvin” should no longer be listed.
CONTINUING PROFESSIONAL DEVELOPMENT

Giving advice on short-acting contraception

In a second article on contraception, Sarah Pillai focuses on short-acting contraceptives that are available from pharmacies.

Two of the most commonly used contraceptives in the UK are condoms and the oral contraceptive pill. This is due to availability but also related to the knowledge of both the user and the healthcare professional. When confronted with a request for “the pill” (or for advice on contraception), the healthcare professional should ensure that the he or she covers all the options and that the client leaves with a method that is fully suited to her needs. Long-acting methods of reversible contraception were covered in a previous article (PJ, 10 October, pp389–92). This article looks at short-acting methods.

Combined oestrogen and progestogen

“The pill” was developed in the 1950s and initially contained relatively large doses of both oestrogen and progestogen, which resulted in a high rate of thrombotic events. We now know that low dose oestrogens (between 15 and 35µg) prevent ovulation in most cycles while progestogen, which resulted in a high rate of thrombotic events, leaves with a method that is fully suited to her needs. Long-acting methods of reversible contraception were covered in a previous article (PJ, 10 October, pp389–92). This article looks at short-acting methods.

Combined oral contraceptive pill

There are over 20 types of combined oral contraceptive pill (COCP) to choose from in the UK. They work primarily by preventing ovulation. With perfect use, failure is of the order of less than one in 100 in one year of use. However, in reality, this increases to approximately five in 100 because people are not perfect pill takers.

In addition to good cycle control, non-contraceptive benefits include reduced dysmenorrhoea and menorrhagia, reduced incidence of premenstrual tension, fewer asymptomatic fibroids and non-pathological ovarian cysts, a reduction in the incidence of benign breast disease (eg, fibrocystic disease) and in ovarian and endometrial cancers, and a reduced risk of pelvic inflammatory disease. COCPs can also reduce the risk of colorectal cancer. However, this is controversial because the incidence of thromboembolism is low and it is reasonable to suggest that all preparations are equally risky or safe (see appendix 4 of “Plan and record”).

Major adverse events with the combined oral contraceptives include thrombotic events, such as deep vein thrombosis and stroke. The incidence of these has been variously reported as between 15 and 60 in 100,000, compared with a base rate of 5 per 100,000 in the general population, and 60 in 100,000 for pregnancy. This increased incidence leads to the avoidance of use of oestrogen-containing contraception in women with other risk factors for thrombosis, such as hypertension, migraine with aura, family or personal history of clotting disorders or thrombotic events, smoking and high body mass index. Prescribers should use the UK medical eligibility criteria for contraceptive use (adapted from World Health Organization guidelines) to decide whether use of a particular contraceptive method is acceptable. For example, some conditions, such as obesity, hypertension, multiple risk factors for cardiovascular disease (eg, diabetes), breastfeeding and smoking, are contraindications to using COCPs. Recent papers in the BMJ have indicated a difference in the incidence of venous thromboembolism with COCPs containing different progestogens.

Before reading on, think about how this article may help you to do your job better. The Royal Pharmaceutical Society’s areas of competence for pharmacists are listed in “Plan and record” (available at: www.uptodate.org.uk). This article relates to “decision-making and problem solving in relation to drug therapy” (see appendix 4 of “Plan and record”).

Sarah Pillai, DipGUM, MFFP, is a lead clinician at NHS Barnet. Dr Pillai is a consultant for Schering-Plough and has received various honoraria from Bayer.

Identify knowledge gaps

1. What is the latest evidence in terms of types of combined oral contraceptive pill and venous thromboembolism?
2. What are the advantages of the combined contraceptive patch?
3. How would you deal with a woman who tells you that her “pill” has made her put on weight?

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CONTINUING PROFESSIONAL DEVELOPMENT

Panel 1: Dealing with missed pills

**What type of pill?**

- For 20µg preparations two or more pills must be missed for there to be a risk of ovulation. For 30 or 35µg preparations, three or more missed pills are said to reduce contraceptive efficacy. Seven days of pill taking are needed to reinstate contraceptive efficacy (ie, if a woman is at the end of a packet, she should not have a pill-free break) and barrier methods should be used during this time.
- With progestogen-only pills, two more pills are needed to reinstate contraceptive efficacy but advice from manufacturers is to use a barrier method for the next seven days.

**Emergency contraception**

However, people are not so straightforward and several pills may be missed at different times. Emergency contraception was discussed in a previous CPD article (PJ, 24 January 2009, pp79–82) and readers are advised to refer to this. Since publication, a new prescription-only emergency hormonal contraceptive (ulipristal acetate 30mg; ellaOne) has been launched (PJ, 10 October 2009, p381). This product is licensed for use within 120 hours of unprotected sexual intercourse or contraceptive failure. It has similar cautions and contraindications to levonorgestrel 1,500mg but it may reduce the effectiveness of regular hormonal contraception. In the summary of product characteristics, the manufacturer also notes that plasma concentrations of ulipristal acetate may be affected even if a woman has stopped taking an enzyme-inducing drug within the past three weeks.

Panel 2: Antibiotics and oestrogens

Starting a course of non-enzyme inducing antibiotics can interfere with gut flora, thus reducing circulating blood levels of oestrogen and increasing the risk of breakthrough ovulation. References such as ‘Stockley’s drug interactions’ can be consulted but a general rule to apply is that there is a risk of combined oral contraceptive pill failure with any antibiotic and a barrier method, along with the COCP should also be used for course of the antibiotic and for a week after. This may be less important with oestrogen patches or the vaginal ring but until there is further evidence caution is recommended. Once a non-enzyme inducing antibiotic has been used continuously for three weeks, alternative contraception should be used for the first seven days of pill taking. COCPs apply in women who have been on long-term non-enzyme inducing antibiotics for over three weeks. However, if the woman starts another antibiotic precautions would again be required for three weeks.

suggest that triphasic preparations have any benefits, although some prescribers believe that they mimic the natural cycle more closely. As well as taking a full history to exclude contraindications, blood pressure and body mass index should be measured. Blood pressure should be checked after three months’ use and annually thereafter because oestrogen can have a hypertensive effect.

Women should be given full instructions on how to take the pill, including what to do if pills are missed. The principle of the COCP regimen is to take 21 active pills and then have a seven-day pill-free interval (or seven days of placebo tablets), during which time contraceptive efficacy is maintained (providing the next packet is started on time). Three or four days into the pill-free interval there is usually a withdrawal bleed. Each pill should be taken at roughly the same time each day.

A pill is only classed as “missed” if it is over 24 hours late. Furthermore, the risk of reduced contraceptive depends on the COCP and the number of pills missed (see Panel 1). Because the main mechanism of action is to prevent ovulation, if the COCP is started early enough in the cycle (ie, on days 1 to 5) it will do this for the first cycle and efficacy is immediate. The COCP can be started at other times in the cycle (providing there is a reasonable chance that the woman is not pregnant) but barrier methods should be used for the first seven days of pill taking.

A new COCP, Qlaira (varying quantities of estradiol and dienogest, estrogen-only tablets and placebo) has recently been released, and this does not have a seven-day pill-free interval. It has been designed to mimic the normal cycle while maintaining anovulation. Missed pill rules are slightly different: the missed pill interval is 12 hours and nine days of extra precautions are required if a pill has been missed. The SPC notes that a patch should be started on the first day of menstrual bleeding. This product may be particularly suitable for women with menstrual withdrawal symptoms, such as mood swings and headaches in the pill free interval, and for women with premenstrual syndrome or menorrhagia.

Potent enzyme inducers significantly reduce the effectiveness of the COCP during use as well as for up to four weeks after their use — in such cases an injectable or intrauterine progestogen, or a non-hormonal method of contraception, would be more suitable. Potent enzyme inducers include carbamazepine, griseofulvin, modafinil, neflavin, nevirapine, oxcarbazepine, phenytion, phenobarbital, primudone, ritonavir, St John’s wort, topiramate, rifabutin and rifampicin. Some antibiotics that are not enzyme-inducers can also affect oestrogen-based contraception (see Panel 2). Much attention is given to interactions reducing contraceptive effect but it should not be forgotten that COCPs can also reduce or potentiate the efficacy of medicines (eg, lamotrigine and ciclosporin, respectively).

**Combined contraceptive patch** The contraceptive patch (Evra) releases oestrogen and progestogen to be absorbed transdermally. These avoid first pass metabolism so the patch has the same potential advantages as the vaginal ring. Patches can be put on any clean dry non-hairy area of skin, but away from the breasts. Recommended areas are the buttocks, abdominal area and upper arm or upper back. The patch should be worn continuously regardless of activity, and should not come off with showering, saunas or swimming. If a patch starts to peel off, it must be replaced with another. Patches are changed weekly with a seven-day patch free interval. There is 48 hours’ grace if the patch change day is forgotten (ie, they will work for up to nine days). Because Evra contains oestrogen, the same contraindications as for COCPs apply.

There are some data with transdermal hormone replacement therapy that indicate that transdermal hormones are less thrombogenic but this has not yet been demonstrated with the contraceptive patch. Some women notice skin irritation or allergy to the patch.

**Vaginal ring** The combined contraceptive vaginal ring (NuvaRing) been introduced in the UK in
is also often used during breastfeeding. (The COCP works primarily by preventing ovulation. The POP ovulation in some women. Desogestrel (Cerazette) thickening the endometrial lining. Some also prevent primarily by thickening cervical mucus, and by (norethisterone, ethynodiol, levonorgestrel) works only pill (POP) or "mini-pill". The older type COCP . However, the failure rate is slightly higher than the women for whom COCPs are unsuitable (eg, those gen-only contraceptives are an option for many are not as extensive as with the COCP so progestogen-only contraception should be discontinued. Contraindications to COCPs; ischaemic heart disease or stroke, this grain-only aura for the first time on a progestogen severe liver conditions. If a woman develops miosis with abortion of the liver. As far as we are currently aware, the as vaginal irritation, and problems with the COCP; the only difference being local side effects, such as vaginal irritation, and problems with easy to forget. Similar to COCPs, also some vaginal effects Similar to COCPs, some skin problems Similar to COCP; also Menstrual irregularities; short missed pill window; unsuitable for "chaotic" pill takers.

**Panel 3: Hormonal short-acting methods of contraception**

<table>
<thead>
<tr>
<th>Method</th>
<th>Combined pill</th>
<th>Vaginal ring</th>
<th>Patch</th>
<th>Progestogen-only pill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfect use failure rate</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Advantages</td>
<td>Menstrual benefits; protects against some cancers, ovarian cysts and benign breast disease</td>
<td>Probably similar to COCPs; aids compliance</td>
<td>Probably similar to COCPs; aids compliance</td>
<td>Can be taken by most women with contraindications to COCPs; daily pill taking affords user control</td>
</tr>
<tr>
<td>Disadvantages</td>
<td>Long list of contraindications; increases risk of thrombosis; easy to forget.</td>
<td>Similar to COCPs, also some vaginal effects</td>
<td>Similar to COCPs, some skin problems Similar to COCP; also</td>
<td>Menstrual irregularities; short missed pill window; unsuitable for &quot;chaotic&quot; pill takers</td>
</tr>
</tbody>
</table>

**Panel 4: Non hormonal short-acting contraception**

<table>
<thead>
<tr>
<th>Method</th>
<th>Typical use failure rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom</td>
<td>15%</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>13–17%</td>
</tr>
<tr>
<td>Cervical cap</td>
<td>Up to 30%</td>
</tr>
<tr>
<td>Femidom</td>
<td>Up to 20%</td>
</tr>
<tr>
<td>Fertility awareness</td>
<td>Up to 30%</td>
</tr>
</tbody>
</table>

**Switching between methods**

Panel 3 gives a brief comparison of hormonal short-acting contraceptives. For various reasons women may wish to change their method of contraception. Many patient information leaflets will advise finishing the last active tablet in the pack of a COCP or, for switching from a POP, waiting until the first day of a period. However, in general, any hormonal method may be switched straight away without extra precautions if that method has been used properly.

If switching from a non-hormonal method to a hormonal method, seven days of extra precautions was contraindicated during breastfeeding for many years, but now may be used six months postpartum or, if no other contraceptive method is suitable, from six weeks).

If a POP is started between day 1 and day 5 of the cycle, the contraceptive effect is immediate. It can also be started at any time in the cycle (providing there is no risk of pregnancy) but, in this case, 48 hours of additional protection is required.

The POP is taken continuously without any breaks, even during menstruation, and should be taken at the same time each day. If a POP is taken late, there is a three-hour grace period during which it can be taken without any loss in efficacy (12 hours for Cerazette). Once this period is exceeded, there is a loss of contraceptive efficacy. If a pill is vomited within two hours, another may be taken. If continuous vomiting or severe diarrhoea occurs, barrier methods must be used for the length of the illness and for 48 hours after because a POP must be taken for two days to be effective.

There used to be a concern that POPs had a higher failure rate in women weighing over 70kg than in those weighing less than 70kg. However, there is no evidence to support this view and therefore the past, unlicensed practice of taking two pills per day should be discontinued.

Like COCPs, POPs interact with potent enzyme inducers but they do not interact with broad spectrum antibiotics. If an enzyme inducer is used, the POP is not suitable as a method of contraception for the duration of the treatment and for at least four weeks afterwards.
must be used (two days for POPs). If removing an intrauterine contraceptive device, abstinence or starting another method of contraception seven days before the removal is recommended unless the device is removed with menses.

Other methods
Pharmacists may be asked about other methods of short-acting reversible contraception. These include diaphragms, spermicides and fertility awareness (see Panel 4, p455).

Barrier methods
Although male condoms are the most popular barrier method, there are several female barriers available, including diaphragms, cervical caps, contraceptive sponges and condoms. The male and female condom are the only recommended methods for reducing risk of sexually transmitted infection. The other barrier methods do not protect the whole area so cannot be recommended for this purpose.

Female barrier contraceptives have relatively high failure rates so may not be appropriate for people for whom an unintended pregnancy is unacceptable. Cervical caps are rarely used in the UK now because of this.

Spermicides
Although some people use spermicides as a sole method of contraception, they are intended for use with barrier contraceptives. The spermicide nonoxynol-9 has been shown in trials to increase the transmission of HIV (human immunodeficiency virus) due to mucosal microabrasions caused by the chemical. Hence the use of spermically lubricated condoms is no longer recommended.

Fertility awareness
Because ovulation occurs only once per cycle, there is an infertile phase following ovulation and before menses. The phase during and just after menstruation can also be a low risk time but that depends on the length of sperm survival and the length of the cycle.

With an understanding of the menstrual cycle, the risks of conception at different times can be assessed. If a woman has a regular cycle, the length of the shortest cycle can be found and along with predictors of ovulation, such as basal body temperature, cervical secretions and position of the cervix, used to predict risks of pregnancy. If time is taken to teach this to a committed couple, this form of contraception is acceptable. Cervical caps are rarely used in the UK now because of this.

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Lactational amenorrhoea
If a mother is breastfeeding, amenorrhoeic and her baby is under six months of age, the contraceptive effect as a result of this is approximately 95–98 per cent successful.

References

Withdrawal
Many couples, particularly those who are spacing a family or who have religious objections to other forms of contraception, use the withdrawal method as a method of contraception. The practice of the penis being withdrawn from the vagina before ejaculation can be successful although it is not recommended, partially because the process may be incomplete, and because there may be sperm present in pre-ejaculate.

Accessibility and choice
For many years, nurses in contraception clinics and general practice have been prescribing short-acting hormonal contraception. From experience with emergency hormonal contraception, pharmacies are seen to be a useful source of advice and in many areas of the UK, they are also part of schemes providing chlamydia testing, pregnancy testing and free condoms, particularly to young people. For this to be extended to providing the oral contraceptive pill, either as a pharmacy-only product or under a patient group direction, seems a logical progression. Pilots of pharmacies delivering prescription of the combined pill are taking place and there is no reason why this should not be extended to increase choice. For example, NHS Lambeth and Southwark, London, is conducting a one-year pilot of supply of COCIs under a patient group direction from pharmacies.

In this and the previous CPD article (PJ, 10 October, pp389–93), I have attempted to present details of methods of contraception so that the reader will be able to inform women about the wide variety without prejudice, bearing in mind that different methods will suit a woman at different points in her life. It is incumbent upon healthcare professionals, to allow women to make informed choices so that every pregnancy is a wanted pregnancy, and sexually transmitted infections becomes less of an issue.

CPD articles are commissioned by The Journal and are not peer reviewed.

Action: practice points
Reading is only one way to undertake CPD and the Society will expect to see various approaches in a pharmacist’s CPD portfolio.
1. Read the summary of product characteristics for Qlaira and NuvaRing (available at http://emc.medicines.org.uk and make sure you feel confident to answer questions on these products.
2. Look into the evidence of contraceptive failure with different antibiotics.
3. Could your pharmacy provide a contraception service? Perform a SWOT analysis and discuss the possibilities with your primary care organisation.

Evaluate
For your work to be presented as CPD, you need to evaluate your reading and any other activities. Answer the following questions: What have you learnt? How has it added value to your practice? What will you do now and how will this be achieved?
What you need to know about hormonal contraception and drug interactions

Earlier this month the Faculty of Sexual and Reproductive Healthcare published new guidance on drug interactions with hormonal contraception. Lin-Nam Wang presents a summary.

Next time you dispense a course of amoxicillin to a woman and her patient medication record shows she is taking Microgynon, you do not need to give her the “additional contraceptive precautions” advice (PJ, 12 February 2011, p155).

The theory behind giving this advice in the past was that non-cytochrome P-450-inducing antibiotics could, temporarily, decrease numbers of bacteria in the colon, leading to reduced enterohepatic circulation of the oestrogen component of combined oral contraceptives. (Bacteria in the colon would have broken down conjugates formed by first pass metabolism and the free drug that was reabsorbed might contribute to contraceptive efficacy.) However, this theory was debatable.

Previous guidance from the Faculty of Sexual and Reproductive Healthcare (FSRH; 2005) stated that trials investigating this interaction were limited by their size, short duration, inconsistent assessment of ovulation and failure to eliminate bias. Supporting reports of pregnancies in women who had taken combined oral contraceptives and antibiotics were dismissed as no proof of causation. The British National Formulary also acknowledged that the risk of this interaction was “probably small”. Nevertheless, it was reasoned that the serious consequences of an unplanned pregnancy warranted a cautious approach.

This approach, however, was never universally adopted in other countries. The World Health Organization states that there is intermediate level evidence that contraceptive efficacy is not affected by most broad spectrum antibiotics. Other supporting factors included that efficacy did not appear to be reduced in stoma patients with no enterohepatic circulation and that some of the reported pregnancies were in women on high-dose pills — if it is accepted that a low-dose pill provides effective contraception, failure of a high-dose pill due to a small reduction in enterohepatic circulation seems unlikely.

The FSH advises no restriction on use, and the UK, in guidance published this month by the FSRH, has now taken this approach. But before you think “at last, some news that decreases pharmacists’ workloads”, note that it is still good practice to advise pill takers to use extra contraception in cases of diarrhoea or vomiting — common side effects of many antibiotics — lasting over 24 hours.

Continuing to provide the old advice is unlikely to harm patients but the new guidance also contains some changes with more significant consequences.

Prescribing with enzyme inducers

It is accepted that enzyme-inducing drugs (eg, carbamazepine, phenytoin, rifampicin) can reduce contraceptive efficacy of both combined and progestogen-only contraceptives although not of the progestogen injections (Depo-provera and Noristerat) or the levonorgestrel-releasing intrauterine system (Mirena). The latest advice leading on from this has been modified. Women starting an enzyme-inducer should be advised to use a progestogen injection, Mirena or a copper-containing intrauterine device for contraception while taking it and for 28 days after stopping.

For those who do not wish to switch contraceptive, the guidance now splits the use of an enzyme inducer into short- (two months or less) and long-term before listing alternatives. For example, with short-term therapy continued use of a combined hormonal contraceptive (CHC; pills containing at least 30µg of ethinylestradiol, patches or rings) is allowed but additional precautions (ie, condoms) are required. In addition, to minimise risk of failure, the faculty recommends that the CHC regimen is extended (continuous [unlicensed] use until breakthrough bleeding) or “tricycled” (using three cycles with no break before a hormone-free interval of four days [unlicensed]). With pills, such regimens are only appropriate with monophasic 21-day products.

This option might suit women who are trying an enzyme inducer and do not wish to disrupt their CHC regimen, but many are unlikely to choose to have to use condoms as well as a CHC. For women on the pill, the guidance suggests prescribing two pills to give a daily dose of 50µg ethinylestradiol under an extended or tricycling regimen.

This last option is also suggested for women on long-term enzyme inducers (but not long-term potent enzyme-inducing antibiotics [ie, rifampicin and rifabutin]).

Prescribing with antiretroviral therapy

Interactions with antiretrovirals have been updated. In particular, Rhoda Lee, staff editor for ‘Stockley’s drug interactions’, who contributed to the development of the guidelines, points out that ritonavir, one of the most potent inhibitors of CYP3A4 known, would have been predicted to increase ethinylestradiol levels but levels are decreased.

“Since publication of the previous guidelines, there have been at least five studies, which, with one exception (atazanavir), have all shown that ritonavir-boosted protease inhibitors (darunavir/ fosamprenavir, lopinavir, tipranavir) modestly to markedly reduce ethinylestradiol levels from combined oral contraceptives. Since
G6PD deficiency

Q. My teenage son is at home in bed with a cold and cough. He has G6PD deficiency; I know he can’t take aspirin but can he take these Actifed tablets (pseudosophradine and triprolidine)?

A. Glucose-6-phosphate dehydrogenase (G6PD) deficiency is the most common enzymatic defect to occur in humans, affecting around 400 million people worldwide. G6PD plays an important role in the protection of red blood cells from oxidative stress, through generating NADPH (nicotinamide adenine dinucleotide phosphate) in the pentose phosphate pathway. Deficiency of the enzyme leaves red blood cells unprotected from sources of oxidative stress, including infection, certain drugs and some foods (typically broad beans). The most common clinical presentations of G6PD deficiency are acute haemolytic anaemia and neonatal jaundice.

G6PD deficiency is most common among people whose ethnic origins are African, Middle Eastern, Asian, Oceanian or Mediterranean. This pattern has some similarities to the distribution of malaria and led to the hypothesis that G6PD deficiency confers some protection against this disease. Despite migration, many countries in these areas continue to have the highest prevalence of G6PD deficiency (eg, the World Health Organisation reports rates in Egypt and Nigeria as about 20 per cent). G6PD deficiency is an X-linked hereditary disease, in which there are mutations in the gene encoding the enzyme, and the condition is classified by the WHO according to enzyme activity levels as follows:

- Class I: Severely G6PD deficient, associated with chronic non-spherocytic haemolytic anaemia
- Class II: Severely G6PD deficient (1–10 per cent activity), associated with acute haemolytic anaemia
- Class III: Moderately G6PD deficient (10–60 per cent activity)
- Class IV: Normal activity (60–100 per cent)
- Class V: Increased activity (>150 per cent)

Most people with G6PD deficiency are asymptomatic throughout life. Of those who are symptomatic most are male.

Drugs: Management focuses on avoiding triggers for haemolysis, in particular drugs. Examples of drugs available in the UK linked with G6PD deficiency mediated haemolysis include: aminosalicylates, ascorbic acid, aspirin, chloramphenicol, chloroquine, dapson, flulamide, mesalazine, methylthioninium chloride, nitrofurantoin, primafine, quinolones, rasburicase, sulphonamides, sulphonylureas and vitamin K analogues. Although some drugs are consistently reported as being problematic (eg, nitrofurantoin), for others the information is inconsistent and, in some cases, contradictory. This probably reflects the fact that a drug that is safe in one patient with G6PD deficiency may not be safe in another and explains the lack of guidance on which drugs may be safely used.

Many of the drugs listed above are rarely used or are second- or third-line choices. Nonetheless, there may be situations where they are the only option (eg, a fluoroquinolone in a resistant infection). In such circumstances treatment decisions should be based on assessment of clinical risk and on considerations that the hazards are invariably dose related.

Cold and cough remedies: The father is correct that aspirin should generally be avoided because of potential risk in G6PD deficiency (and also given the link with Reye’s disease if his son is under 16 years). If an analgesic or antipyretic is required, some sources suggest that paracetamol or ibuprofen are not problematic, while others classify them as low risk.

In terms of antihistamines in G6PD deficiency, there is limited information available, with just one source suggesting that antazoline and diphenhydramine are low risk.

New products

The guidance includes new products such as ulipristal (EllaOne). This progestosterone receptor modulator could also be affected by enzyme inducers but, unlike levonorgestrel (eg, Levonelle 1500), doubling the dose is not advised. Efficacy might also be affected by drugs that affect gastric pH (eg, antacids, proton pump inhibitors and H2 antagonists). Moreover, the guidance highlights a concern that ulipristal could reduce efficacy of progestogen-containing contraceptives and additional precautions after taking this emergency contraceptive (for one week plus the time required for contraceptive efficacy to be established — see individual summaries of product characteristics) are advised.

The possibility that orlistat (ie, Alli) can reduce absorption of oral contraceptives by inducing diarrhoea is also mentioned.

Resources

Those supplying hormonal contraceptives should ask women about their current and previous medicines use (including herbal and dietary products) and tell them to seek advice before starting new drugs, the faculty says. Pharmacists might find the appendices in the new guidance useful, even if they do not read the full document. Other resources they might find of use include an FSRH statement on antiepileptic drugs and contraception (2010, www.fsrh.org) and CPD articles on contraception (available on PJOnline).