abortions, the relative risk of breast cancer was 0.93 (95% CI 0.89–0.96), compared with women who had never had an induced abortion. The corresponding relative risk for spontaneous abortion was 0.98 (95% CI 0.92–1.04).

In contrast to the findings of many retrospective studies, the prospective data suggest that induced or spontaneous abortions do not increase a woman's risk of breast cancer.

Reviewed by **Louise Melvin,** MRCOG
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Effects of conjugated equine estrogen in postmenopausal women with hysterectomy. The Women's Health Initiative Randomised Controlled Trial. *JAMA* 2004; **291**: 1701–1712

This study was one of two parallel, randomised, double-blind, placebo-controlled trials designed to test the effects of this type of hormone replacement therapy (HRT) on chronic disease. The National Heart, Lung and Blood Institute in the USA set the study up 13 years ago. The oestrogen plus progestogen arm of the trial was halted in July 2002 due to increased risk of coronary heart disease, thromboembolic disease and breast cancer. This arm of the trial compared use of oestrogen only HRT (conjugated equine oestrogen) with placebo in nearly 11 000 women aged 50–79 years. The study was stopped a year before its scheduled conclusion, even though no predefined boundaries had been crossed. There was also a high degree of non-compliance: 50% by the seventh year. The study provides us with some important information. The treatment group had a 39% increased risk of stroke compared to the non-treatment group (44 vs 32 per 10 000 person-years). Contributing factors may have been the small but persistent increase in blood pressure and the known effect of oestrogen on increasing the risk of thrombosis. There was a reduction in low-density lipoproteins (LDLs) and an increase in high-density lipoproteins (HDLs) but no impact on coronary heart disease incidence. Oestrogen reduced the risk of fractures by 30% to 39% (11 vs 17 per 10 000 person-years) in the treatment group. They reported a lower rate of breast cancer in the treatment group compared to placebo. This particular result is contrary to the oestrogen plus progestogen arm of the Women's Health Initiative (WHI) trial and clearly needs further investigation. The small numbers may have confounded the results. Two components of the WHI on the effects of a low-fat eating pattern, and the effects of calcium and vitamin D supplements are still awaiting publication. For the present time, this study contributes further weight to the advice that HRT should be used for short-term relief of vasomotor symptoms only.

Reviewed by **Laura Patterson,** MRCGP, DFFP
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Advanced provision of emergency contraception does not reduce abortion rates. Glasier A, Fairhurst K, Wyke S, et al. *Contraception* 2004; **69**: 361–366

This is a community intervention study designed to determine whether offering advanced supplies of emergency contraception (EC) to large numbers of women influenced the abortion rates. In one area of Scotland women between 16 and 29 years were targeted through health services to be allowed to take home five courses of EC to keep for when needed. There were 85 000 women in the target age group of whom 17 800 took a supply of EC home. Some 45% of this group took at least one course of the EC provided. The authors state that they have low abortion numbers in the intervention area (<2000 per year of the target group) and also reported that there is a high uptake of contraception in the area but numbers are not given. The results of the intervention did not reduce the abortion rate when compared with other areas of Scotland with no intervention.

In their discussion the authors did not emphasise that the EC used was Schering PC4 which is now not available. Levonelle® is now prescribed as it has been shown to be more effective but by how much is debatable. If the area targeted had a high uptake of contraception use then women probably were not aware of their pregnancy risks when using other methods so did not use EC when necessary. This study shows that no matter what we do as clinicians, we cannot predict what contraceptive users will do and how competently they can recognise when they are at risk of pregnancy.

The study leaves concerns that sexually active young people are given messages that EC is available if they have pregnancy risk but this study may indicate that by making EC readily available this still will not impact on the abortion figures. Abortion figures will only reduce when the sexually active population are willing to use more effective long-term methods of contraception where EC is rarely needed.

Reviewed by **Judy Murty,** DRCOG, MFFP
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BOOK REVIEWS

The X in Sex: How the X Chromosome Controls Our Lives. D Bainbridge. Cambridge, MA: Harvard University Press, 2003. ISBN: 0 674 01028 0. Price: £12.49. Pages: 181 (hardback)

This highly readable book tells the story of the X chromosome from Aristotle's musings on gender differences right through to a modern understanding of the genetics of the X chromosome. The author's engaging style makes modern genetics accessible both to the complete layperson and to those of us for whom preclinical genetics are a hazy memory. Bainbridge is a lecturer on comparative anatomy and physiology at the Royal Veterinary College in London and uses his broad knowledge of the animal world to set human sex determination in a fascinating wider context. Who would have thought that many species could do away with the Y chromosome altogether, or that the male kangaroo uses his redundant pouch as a scrotum?

In a chapter entitled 'The Duke of Kent's Testicles', Bainbridge describes the unfortunate spread of haemophilia through 19th century European Royal families to illustrate the inheritance of sex-linked disorders. From a disastrous random mutation in a sperm in one of the Duke's testicles to the Russian Revolution, the history is irreverent but the genetic implications are well illustrated.

The final chapter covers intriguing aspects of human sex determination: what makes men into men and women into women, in both the genetic and the broader senses. This chapter explains why identical twins are more often female than male and also why female twins are never quite so identical as male twins. There are also genetic theories to explain why women are more prone to autoimmune disease. Best of all is the revelation that little girls express a gene for good behaviour – and little boys do not!

This slim book is a good read, amusing yet informative and authoritative.

Reviewed by **Kate Weaver,** MB ChB, MFFP
Staff Grade Doctor in Reproductive Health Care, Edinburgh, UK

Sexual Pharmacology: Fast Facts. Robert Taylor Segraves and Richard Balon. New York, NY: W W Norton & Company, 2003. ISBN: 0 393 70354 1. Price: £24.68. Pages: 311 (paperback)

This American book has a catchy title that completely describes what you are getting – or does it? It seems obvious to point out that the book is very pharmacological, but perhaps the subject cannot be fitted quite so completely into pharmacological categories. These 'facts' seem to have been over-interpreted when presented to 'practising physicians'. The lists of references included a wide range of animal studies (mice, cats, rats, hamsters, stallions, male mosquito fish and striped bass). I was concerned as to how much of this could really be evidence of sexual function in the human species.

The book is divided into two halves. The first deals with the effects of drugs on the causation of sexual problems and the second addresses drug treatment for sexual problems. The introduction to the treatment of premature ejaculation says: 'None of the mentioned agents has been approved by the FDA for the treatment of PE'. It seems unusual to devote a whole chapter on treatment to unlicensed drugs.

Although passing reference is made to the 'psychosocial context' it would be easy reading this book to feel that the answers to sexual problems lie only in pharmacology. The authors state that: 'Many men have … unrealistic expectations of their sexual performance'. There was no suggestion that this too needs addressing.

The authors ask even more of us in the consultation. They state: 'It is critical to obtain a baseline measure of sexual function prior to starting a new pharmacological treatment'. This seems an unachievable goal. We know that doctors are not yet very good at talking with their patients about sex. Furthermore, the time constraints within which we all work mean that this issue will not always have sufficient priority to merit a share of the consultation.

Having felt cause to argue in particular with the way things are said in this book, I do think it has some use in presenting pharmacological information about sexual function. Perhaps that is after all what it intended to do.

Reviewed by **Alex Connan,** MRCGP, MIPM
General Practitioner and Family Planning Doctor, Edinburgh, UK

WEBSITE REVIEWS

Understanding laboratory tests

The Association of Clinical Biochemists has launched this website to help patients understand about laboratory testing. I suspect (see the review about high vaginl swab testing and reporting) that many doctors might also find it helpful. The home page gives some news items, together with a search box and some drop-down menus. The menus are headed Tests, Conditions and Diseases and Screening, so that information about individual tests or conditions can be located. On the left are links to more general information such as how to interpret the terms used in tests (like reference ranges) and tours of what happens to samples when they reach the laboratory. There is a feedback page and the site is peer-reviewed,