March 2017 Newsletter:

Testosterone His and Hers

I have written about testosterone (T) as well as estrogen (E) in past Newsletters February 2015 and October 2015 but there is still much more to write about particularly as most GPs are “unconvinced” (a polite interpretation) and refuse to prescribe the T gels. It is obviously a vital hormone in men for energy, mood and libido but we forget that T levels in women are higher than their E levels and vital for the same reasons. It is a very normal and vital hormone for women of all ages.

For women

Younger women need T for development of the secondary sexual characteristics of pubic and axillary hair and a normal sex drive. Alas T can also produce acne and excess hair growth in these teenagers. After the menopause there is an increase of FSH and a sudden decrease in E, which leads to hot flushes, night sweats, insomnia and vaginal dryness and pain. There is also a more gradual decrease in T, which adds to the problems of loss of energy, loss of libido, poor concentration and depression. The clues are all in the history as blood levels usually show T levels at the low end of the normal range.

The best example of T deficiency in women is after removal of the uterus and ovaries without T replacement. If lucky these women will be given some HRT in the form of low dose oral estrogens which although inadequate will at least stop hot flushes and vaginal dryness. Within a few months they will develop symptoms of testosterone deprivation which if untreated will go on for years. My colleague Robert Sands and I published this account of the Female Androgen Deficiency Syndrome (FADS) in the American Medical Journal 20 years ago. These symptons are depression, loss of libido, loss of energy, poor concentration and headaches. These are nearly always cured by the administration of T either by gels such as Testim or Testogel or a T implant together with oestradiol.

Next week I am debating in Florence with a Mayo clinic epidemiologist. His view is that we should stop removing ovaries in premenopausal women because it leads to depression, anxiety and more heart attacks. I agree with his data but not the conclusion. At the same meeting last year I told him that I was surprised that people took his much publicised work seriously as we have known about this result of early oestrogen deprivation for 40 years from the premature menopause data. My response is that there may be very good reasons to remove ovaries – pain of endometriosis, pelvic infection, severe PMS or simply prevention of ovarian cancer but we should learn to treat oophorectomised women correctly. Removing the ovaries in premenopausal women without replacing the E and T is an incomplete operation like omitting to close the wound. These women should have replacement transdermal oestrogen and testosterone for many, many years until they wish to stop in their seventies. Many people take statins for life or like me antihypertensives for life or anticoagulants for life – so I cannot see the problem for suggesting that

hysterectomised women have transdermal oestrogens and transdermal testosterone for ‘life’ or at least for a long time until they wish to stop in their late sixties.

Aside from this we should not forget that one in three women will develop an osteoporotic fracture some time in their life whereas women having transdermal E and T are at virtually no risk. That is an enormous contribution to the health of the individual and to women. Unfortunately politicians only seem to see a three year accountancy plan and do not have any concept of long-term prevention even when it is clear and uncontroversial as relationship between oestrogens and protection of the skeleton.

Such medication is hugely beneficial and is absolutely safe. The only evidence of increased thrombosis comes from oral oestrogens whether it is HRT or the birth control pill. There are transdermal hormones by gels, patches or implants which do not affect the coagulation system. There is no increase in deep vein thrombosis pulmonary embolisms or worse coronary thrombosis – that is very well established. The breast cancer risk, if it really exists occurs only in patients having continuous synthetic progestogens. All of the randomised studies on oestrogen alone show no increase or a reduced incidence of breast cancer. Therefore the answer for HRT whether it is short-term or long-term is to have transdermal oestrogen, transdermal testosterone if needed and little or low progesterone avoiding synthetic progestogen. Patients after a hysterectomy and bilateral salpingo oophorectomy are ideal for this safe medication.

The problem in the UK is that the T gel is not licensed and hence the GP’s will use that as an excuse not to prescribe. We know that transdermal T is the only safe way of giving this hormone. There was a T patch called Intrinsa that was on the market ten years ago. It seemed to work in clinical trials giving women two extra sexual episodes a month but in practice it did not work very well and with the skin reactions that occur with the patch women soon stopped using it and therefore the company withdrew it from the market, for financial reasons not medical reasons. Nobody has done a similar study on T gel because it will be expensive. No doubt this will happen. It will be found to be very effective and the price will go up. Such is life.

Until then my preference is to use T gel, Testim or Testogel for the effect that it has on general well-being as well as the more specific reasons of loss of libido, depression and tiredness. I recently did a survey of all of the patients with depression that I have treated and it seems that 93% of my patients who have transdermal oestrogens for these problems also have T by gels or implants. These women literally have their lives transformed by this treatment particularly if they can wean themselves off the inappropriate antidepressants and mood stabilising drugs that they are on and even swapping oral preparations to the safer and more effective transdermal hormones.

How about the men?

There is certainly a syndrome of decreasing T levels in middle-aged men producing tiredness, loss of confidence, loss of sexual desire and a poor erection. Such men if found to have low T levels can be treated with T gels or T intramuscular injections. We used to give T implants but the cost of T pellets has increased

enormously over the last three years, so to insert eight to ten pellets in men at one time would cost a fortune and I do not encourage it. The T preparations that we have available at the moment work well in men but there is another reason to detect these men with low T levels as they often have low, very low bone density.

We all know that osteoporotic fractures occur in one in three women if they do not have hormone therapy but such fractures also occur in one in twelve men. It is common place for me to see men with low sex drive etc with a low T but to their surprise they often have extremely low bone density. This is best treated in men by T which then seems to cover most of their symptomatic problems and also improve the bone density. It is a pity that those physicians who are looking after osteoporosis are terrified by the use of hormones in spite of regarding themselves as endocrinologists! With T there is a way of not only improving the bone density but improving problems with mood, tiredness and libido. However physicians do not ask questions about libido – they are far too conservative and well-mannered. The
Women again
Five years ago I published a paper "Ten reasons to be happy about hormone replacement therapy: a guide for patients". This was published in an academic journal and has not really reached the most important audience which is the patient. You can see the article on my website by clicking HERE but in summary the ten points were:

1. HRT will stop hot flushes and sweats
2. Oestrogens will treat vaginal dryness and many causes of painful intercourse
3. HRT increases bone density and prevents osteoporotic fractions
4. HRT protects the intervertebral discs
5. HRT does reduce the number of heart attacks
6. Oestrogens help depression in many women
7. HRT improves libido
8. HRT improves the texture of the skin
9. 'I am a nicer person to live with'
10. HRT is safe

I would add to this last point that it was not stressed in the paper that transdermal oestrogens are much safer than oral oestrogens whether it is the birth control pill or HRT because it does not induce coagulation factors in the liver and there is no increased risk of deep-vein thrombosis, pulmonary emboli or stroke which is certainly the case with oral birth control and possibly with oral HRT.

I have also failed to stress the importance of not having continuous synthetic progestogens as found in many oral and patch preparations. It is quite clear that any highly debatable increase in breast cancer is due to continuous progestogen. All studies on oestrogens alone show no change or a decreased risk of breast cancer. Not only am I stressing the important treatment of symptomatic issues of this treatment but I should stress that HRT should be in the form of transdermal hormones not oral. Women with a uterus should have a short course of seven to ten days of the natural progesterone, Utrogestan, each month and should not take continuous synthetic hormones such as Norethisterone, Provera or Drospirenone.

With best wishes
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