MENOPAUSE MATTERS

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Injections, pills, stockings & DVTs

Deep vein thrombosis (DVT) is a recognised complication of surgery with certain operations and conditions more at risk than others. Older patients, especially those with malignancies and co-morbidities are the most likely to develop thromboembolic sequelae and prevention is strongly recommended.

If a person suffers a thrombotic event they require long-term surveillance and therapy which can delay recovery, increase morbidity and have cost implications as well as possible lifelong anticoagulation being required. All these factors make post-operative prophylaxis imperative for women having cancer surgery and standard practice is 28 days of a subcutaneous low molecular weight heparin product, such as enoxaparin, but it is unpleasant to inject (leading to low compliance) and is often accompanied by site-bruising, bleeding, nausea, vomiting and is expensive.

An alternative is apixaban – a factor Xa inhibitor – which has advantages of oral administration, easy storage and is less expensive, but its value is unproven in the field of gynaecological oncology. To test its non-inferiority to enoxaparin, a trial was carried out comprising more than 400 women who were operated on for a suspected malignancy and each agent was given for 28 days – enoxaparin 40mg subcutaneously and apixaban 2.5 mg bd orally (Guntupalli et al *JAMA Netw Open* 2020;3:e207410). Both treatments had low rates of major bleeding – less than 1% – with fewer patients in the apixaban arm experiencing non-major bleeding (5% v 10%) and venous thromboembolic events were below 2% in each group.

These results suggest oral anticoagulation is at least comparable to heparin injections and the findings should have a significant effect on the expediency of future DVT prophylaxis following surgery.

And what of stockings?

The use of graduated compression stockings for post-operative DVT prevention has practical appeal because they are "seen to be doing something" but the empirical evidence for their effectiveness is not convincing.

The drawbacks are that they are difficult to put on correctly and they do not stay in position with movement, as well as being uncomfortable and can aggravate ischaemia in patients with poor arterial circulation. These practicalities plus the costs involved have persuaded some UK hospitals to abandon their use without compromising DVT post-operative rates compared with national figures but the definitive work has come from a randomised trial of heparin alone versus heparin with stockings (Shalhoub et al *BMJ* 2020;369:m1309). Nearly 2 000 patients undergoing elective surgery were given heparin subcutaneously but half were given additional stockings to wear post-operatively. Less than 2% in either arm of the study had an image-confirmed deep vein thrombosis allowing the researchers to suggest that "Current guidelines based on historical data should be revised".

Editorial comment – These two trials are positive developments for patients and care providers. Awkward, inconvenient and expensive treatments can be replaced by a single oral anticoagulant which gives at least equivalent results, with more satisfaction for all concerned.

But why don't we take really bold steps forward? We, the surgeons could insist on prehabilitation (Banugo & Amoaka *BJAEd* 2017;17:401-5) with exercise (Twomey et al *JAMA OHNS* 2020 doi. 10.1001/jamaoto.2020.1346) and early mobilisation combined with self-controlled analgesia, thus using shared decision-making and greater patient participation to maximise outcomes.

Reproduction statistics from the United States 2019

Category	2018	2019	Decrease	Comment
Total births	3 792 000	3 746 000	1%	This is the lowest total since 1985
Total fertility rate	1730/1000	1705/1000	1%	The replacement rate is 2100/1000
Teenage birth rate	17.4/1000	16.6/1000	5%	A decline of 8% in the last decade
Births 40-44 years	11.8/1000	12/1000	+2%	Only age group showing an increase
Caesarean section	31.9/100	31.7/100	-	Very slow decline in last decade
Preterm births	10.0/100	10.2/100	+0.2%	Mostly in late preterm deliveries

Editorial comment – A total fertility rate below 2.1 per woman (or 2 100 per 1 000 women over their life-times) means the population is not being replaced – unless there is nett immigration. The rate in the US has generally been below replacement levels for the last 50 years.

Despite considerable effort, preterm delivery rates continue to rise, and have done so for the last 5 years. This is mainly due to increasing disparity between high- and low socio-economic status within the total population.

O&G Income in the United States

1. 5% of all US specialists are in the field of O&G
2. US Ob/Gyn specialists earn just over $300 000 per annum
   This is midway on the specialist income ladder
   Only half feel they are fairly financially compensated
3. Female specialists earn 18% less than their male counterparts in O&G
   The average disparity across specialities is nearer to one third less
4. The present male to female ratio is 3:1
5. They spend 40 hours per week seeing patients
6. 14 hours per week are spent on administration
7. A quarter use clinical assistants and half employ nursing practitioners
8. 75% said they would choose medicine again and a similar number would choose O&G again
9. During the Covid epidemic there has been a reduction of about half the number of patients seen and half the usual revenue collected from practices
10. Remote patient engagement increased by 225% during the lock-down.

According to Martin. *Medscape Ob/Gyn Compensation Report 2020*

Sexual activity in the United States

Apart from being intriguing, data on sexual activity reflect the general well-being of any community. Sexual relations are important and "can positively influence life satisfaction and happiness" within partnerships and more broadly national surveys are taken as a measure of the public health of a nation. Chronological changes in the frequency of sexual activity or abstinence allow for speculation as to why more, or less action is being recorded.

The latest figures in the United States describe the past two decades (up to 2018) as garnered from General Social Surveys and show "increased sexual inactivity" (Ueda et al *JAMA Netw Open*.2020;3:e203833). More precisely they found among young American adults, with a mean age of 20 years, the percentage of individuals experiencing no sexual activity in the last year, rose from 20% to 30% with this trend being more marked in men than women and became less pronounced with age. There was also a decrease in the frequency of sexual activity per week, which was 10% lower over the review period, and this held for men and women; those in committed relationships; those in full-time or part-time employment and for students.

These are large-scale changes and were consistent over age sub-groups and differing income brackets. They were also in keeping with the trends published by the UK Natsal 3 project (Mercer et al *Lancet* 2013;382:1781-94). The reasons given as to why people are having less sex, follow two lines of thought (Twenge *JAMA Netw Open* 2020;3:e203889). Firstly, in the United States there is a significant slowing of young peoples' "growth to adulthood". This encompasses leaving home at an older age, gaining employment later in their lives and planning reproduction starting in their 30s. However, none of this explains the decreasing frequency of sex between established couples. Secondly, the growth of interest in the social media is a new phenomenon which and can preclude social and (by implication) sexual interaction. There is a wide array of electronic entertainment available anywhere, and on a multitude of devices, so distractions from intimacy abound.

Could these changes not be caused by something more prosaic such as lowered libido due to chemicals to which people are exposed? In the United States last year the total fertility rate was 1700 per 1000 women, a record low for the nation and world-wide there are substantial reductions in sperm counts that remain unexplained. Or could it simply be the obesity epidemic?

Should women and men be trained differently?

Obstetricians and gynaecologists require mastery over a wide range of skills. Clinical gestalt is a mix of pragmatic tutelage and mentorship but specifically in surgery there are endoscopic, microsurgical and robotic simulation programmes, where it matters how training takes place. A broader question has been posed in these situations: should women and men be trained differently?

Attitudes and confidence play major roles in surgical progress and these attributes have gender variations. Women demonstrate more diligence, greater adherence to protocols and are less likely to take "short-cuts", while men tend to have more adventurous approaches and exhibit higher levels of self-confidence with regard to new techniques and frontiers. Women under-rate and men over-rate their abilities. Risk taking and risk aversion, assertiveness and hesitancy also follow gender lines and these tendencies should be taken into account in support and feedback (Babchenko & Gast *JAMA Surg* 2020;155:373-4).

Research shows that style in training is more important than gender or personality type. Objective measures of higher "constructive style" scores correlate with better coaching performances plus there should be sensitive and regular feedback (Vande Walle et al *JAMA Surg* 2020;155:480-5).

Perhaps the final word should come from a non-academic source – Anson Dorrance – the hugely successful coach of the US national women's soccer team who said:

"In coaching women, there is more a need for ego-boosting.
With men, it is more ego-busting."

Athol Kent

Menopause Matters is a monthly review of matters menopausal that have recently appeared in the journals. It is produced for the South African Menopause Society and the summaries concentrate on clinical issues although some underlying patho-physiology will be included to ensure a scientific basis for the work. These summaries and opinions do not necessarily reflect the views of the S A Menopause Society.

*The idea is derived from the Journal Article Summary Service (JASS) which summarises general O&G articles. Information about this service can be obtained from Athol Kent (*atholkent@mweb.co.za*) or from the JASS website* www.getjass.com