**Read all about it...** It can be awkward when a patient asks you about a report in their favourite tabloid detailing an amazing research breakthrough or a 'cutting-edge' new treatment / test and you don't know what they are talking about! So this section fills you in on the facts.

## Low libido: taking testosterone may not be the answer

#### The Times – 3 September 2019

Not the usual fare for this section of Urology News, but this was a nicely written editorial about testosterone prescriptions. I will freely admit to never having given this a great deal of thought before.

My experience with testosterone prescribing is somewhat limited, but probably not that dissimilar from most readers; I probably see a few patients throughout the year who have late onset hypogonadism (LOH). Mostly, they will report low libido and erectile difficulties, but lethargy and poor energy levels are often reported as well. It is mostly a fairly straightforward prescription, unless the gentleman has been troublesome enough to also present with a raised PSA, in which case – all bets are off!

It was something of a surprise then to read this editorial, which details that prescriptions for exogenous testosterone have been rapidly increasing year on year. The editorial states a popular testosterone gel is now being prescribed more than 50,000 times per month, but they do not cite the source of this data. The editorial then makes some good points about the fact that there are likely patients with borderline testosterone levels who perhaps do not really need testosterone and that perhaps some older men should be more accepting of a declining testosterone level in old age. The article suggests the issue has become over-medicalised and that healthy living and exercise are a better form of treatment.

The issue I have, however, is that I do not believe there is a significant problem here. The website 'openprescribing. net' will supply you with full community prescribing data for every British National Formulary (BNF) drug and drug group for the last decade, from every GP practice and Clinical Commissioning Group (CCG) in the UK. The data available online does not chime with the data in this article – there has been a slight upward trend in all testosterone prescribing as a whole over the last five years, from about 15,000 prescriptions per month, up to 22,000 per month (which is fairly static over the last couple of years). By my maths though, this is still less than 0.1% of the adult male population of the UK on supplemental testosterone. This does not sound like some sort of epidemic, given that the European Male Aging Study found hypogonadism in 13.8% of men aged 40-79 (that would mean there is around two million men in the UK with LOH). If we assume the majority of men get their treatment through the NHS, then we are possibly even under-treating LOH.

On balance, I think it is fair to say that this is something we are not getting quite right across the country. The data at 'openprescribing.net' shows wildly different prescription rates in certain areas and the exact prevalence of LOH in the UK is not really known.

# Test for prostate cancer could end ordeal of needless biopsies

### The Times – 10 September 2019

This is the usual fare for this section of *Urology News*: an article about prostate cancer where the word 'biopsy' is inevitably prefixed by the word 'needless'. I have been commenting on the development of 'liquid biopsy' technology for years, but it would appear that we are now very rapidly approaching the point at which it will become a reality in the UK and there is some new terminology to memorise.

To briefly recap; 'liquid biopsy' is the technology of using blood samples to look for DNA fragments and cell fragments from cancers to make the diagnosis without the need for a traditional biopsy. A team from the Barts Cancer Institute, including Mr Greg Shaw and led by Professor Yong-Jie Lu, has now completed a study of the detection of CTCs in prostate cancer. The company producing the technology is currently seeking FDA approval in the US. The findings are published in *The Journal of Urology*.

CTCs are 'circulating tumour cells' and this particular technology relies on identifying whole cells for analysis. In a cohort of patients with known localised prostate cancer, 54% of patients were 'circulating tumour cell' positive. In undiagnosed patients, AUC (area under curve – as measure of sensitivity / specificity) was 0.93 when combined with PSA and MRI data, i.e. close to approaching the critical threshold of 0.95 for a medical test.

The bottom line here is that liquid biopsy is probably going to be commercially available next year and it is more now a question of identifying the correct panels and algorithms for this technology to supplant sections of the current diagnostic pathway. This is going to require a great deal more research and validation yet though.

## "Liquid biopsy is the technology of using blood samples to look for DNA fragments and cell fragments from cancers to make the diagnosis without the need for a traditional biopsy"





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