**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.

## Boost for men - taking statins cuts the risk of deadly prostate cancer by a quarter, study says

#### The Sun - 22 November 2019

This news story filtered through various media outlets at the end of 2019 and is likely to be of great interest to men of a certain age. Unusually, I have little issue with the headline at all and it is utterly accurate. Possibly, some readers may mistake the 'deadly' for being the simple use of an emotive descriptor to be placed in front of 'cancer', but it is in fact describing the exact clinical group which one day may benefit from this research.

The study, published in *Clinical Cancer Research*, has been authored by researchers from Belfast, Dublin, Johns Hopkins and Memorial Sloan Kettering Cancer Center (among others). This prospective study followed 44,126 cancer-free men for 24 years. During this period, 6305 prostate cancers were diagnosed, of which 801 (13%) were lethal (or 'deadly'). This 13% sub-group either presented with metastatic disease at diagnosis, developed metastasis later or died from prostate cancer.

The key finding in this publication was that the use of statin medication was inversely associated with the risk of lethal prostate cancer (HR 0.76). There

is seemingly no impact on the risk of developing prostate cancer overall.

Molecular tumour classification showed statins were associated inversely with PTEN-null cancers. PTEN (a gene coding for phosphatase and tensin homolog) is a tumour suppressor and loss of both alleles of PTEN is associated with prostate cancer metastasis and androgen independence. Indeed, PTEN-knockout mice are used to study prostate cancer.

There is a suggestion here that statins play a role in moderating intra-cellular biochemistry (through immune and inflammatory pathways) in such a way that it may protect against PTEN deletion or mutation and prevent prostate cancer from becoming 'deadly'.

Personally, I find it slightly disconcerting to have it 'brought home' that we really do not have a full grasp on how some everyday medications interact with the human body on a genetic level, but at the same time – this clearly looks like the genesis of a potential treatment for men on 'watchful waiting'.

# Hero doctor saves man's life after sucking urine from his bladder mid-flight

## The Daily Express - 21 November 2019

A little something to think about when you are packing your carry-on for your next airline flight. This story details a vascular surgeon from China who found himself attending a fellow passenger stricken with a one litre urinary retention whilst on a long-haul flight. The true details of the incident can be pieced together from the information in the story and the pictures of the surgeon in action.

The doctor was furnished with just a needle, some oxygen tubing and a few containers. He clearly planned to siphon the urine via a supra-pubic needle puncture with oxygen tubing attached to the needle. The pictures show the affected passenger laid out on the floor in the galley area at the front of the plane. It would appear though

that shortly after making the puncture it was discovered that siphoning would not work (having the patient on the floor may have been enough alone for this to fail).

With a crowd of flight attendants looking on in concern, the poor surgeon probably felt committed to finding a solution. So, he resorted to sucking the urine out by mouth and spitting it into cups. In a true act of heroism – rather than just removing a few hundred millilitres to gain the patient a little comfort, he went 'all in' and removed more than 800mls over 37 minutes using this novel method.

So, next time you are preparing your hand luggage for a flight - consider packing a syringe!

## The Prostate Surgery that won't harm your sex life: new technique could spare men from cruel side-effect of impotency

## The Daily Mail - 19 November 2019

The Daily Mail reports on the NeuroSAFE PROOF study (led by Mr Greg Shaw at UCL – also mentioned here in the last issue!), a multicentre, single-blinded, randomised controlled trial (RCT) to assess the feasibility of the NeuroSAFE method for radical prostatectomy in prostate cancer.

The NeuroSAFE technique, originally developed in Germany, is a method for improving 'nerve-sparing' rates during robot-assisted laparoscopic prostatectomy (RALP). Excising the neuro-vascular bundles with the specimen helps to ensure negative margins on the specimen. However, it has massively detrimental effects on potency postoperatively. NeuroSAFE involves intraoperative fresh-frozen specimen analysis to assess the postero-lateral aspect of the prostate margin and look for evidence of capsular breach, before deciding whether a nerve-sparing procedure can safely be performed. The biggest role for such a technique is in T3 tumours.

In a previous study of just over 1000 NeuroSAFE cases, the technique was shown to improve nervesparing rates. In pT3a disease, nerve-sparing improved from 74% to 94% and in pT3b it was 30% to 91%. This indicates a great deal of promise. The procedure does become more technically demanding in needing to remove the specimen early without losing pneumoperitoneum, but would appear to be a feasible and logical next step in the evolution of UK RALP surgery, provided the data from the NeuroSAFE PROOF trial backs this up and shows no detriment to oncological outcome with increased nerve-sparing. The trial is ongoing in London, Glasgow, Sheffield and Bristol and is due to close in April 2021.

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