Active Surveillance in DCIS: **IS IT A VIABLE OPTION?**

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Recently there has been increased interest in "active surveillance" for Ductal carcinoma In Situ (DCIS) in breast cancer. This has been driven by several key figures in the world of breast cancer management, in the United States in particular but also in Europe.

It has now been brought to attention in the popular domain by recent cover page articles in Time magazine, which interviewed a number of clinicians and patients who are opting for this approach.

SO WHAT IS IT AND WHEN MAY IT BE USEFUL?

As you aware, DCIS is a precursor lesion for breast cancer, similarly to adenomas of the colon being the precursor to carcinomas. The difference is that it often does not arise in a well-defined location (such as polyp in the gut) and can be widespread or present in multiple locations without continuity between the sites. Furthermore, we know that it can be stratified into High grade, Intermediate and Low grade according to pathological criteria, which are of course artificial. The low grade DCIS is also on a continuum of the spectrum from its precursor Atypical Ductal Hyperplasia (ADH), with all the cut off criteria of course being artificial and used for the purposes of classification and prognostication.

We also know that High grade DCIS is much more likely to progress to invasive breast cancer than low grade. As a result of this the proponents of "active surveillance" have been suggesting that we may perhaps spare the treatment or the overtreatment of patients diagnosed with these lesions.

Active surveillance may include observation with varying degrees of imaging and clinical assessments either six monthly or yearly, and may sometimes include endocrine treatment.

WHY CAN THIS BE AN ISSUE?

Mainly because the incidence of DCIS has skyrocketed since the introduction of BreastScreening, going from 5% of all diagnosed lesions to 20-25%, leading to the suggestion that there is a significant amount of overdiagnosis and overtreatment of patients who may have very indolent disease, which ultimately may not cause them any harm.

I have to agree that we are overtreating patients, particularly in this subgroup. However, the problem is that we still don't know which of these low-grade DCIS patients are actually indolent and which are the ones that will progress to active invasive disease. Evidence suggests that a significant proportion of them will.

SO CAN WE SAFELY SAY AT THE MOMENT, WHO CAN BE OMITTED FROM ACTIVE TREATMENT?

This was a hotly debated subject at the recent World Congress on Controversies in Breast Cancer (CoBRA) held in Melbourne. Despite passion on both sides of the debate, it seems the evidence at present is insufficient to make a clear change in practice.

SO THE CURRENT ANSWER TO OMITTING ACTIVE TREATMENT IS PROBABLY NO

But watch this space. As the debate heats up, two large randomised trials are being set up to try and answer this question both in the UK and the US.

In the meantime, we can certainly focus on the available level 11 evidence on who may be spared radiotherapy for low grade disease and on minimising the number of inappropriate mastectomies in this population group, which usually treats the patient's anxiety rather than their cancer risk.

In due course we will have more information and evidence to present and discuss with our patients allowing us to suggest active surveillance with confidence if that it is the right option for the patient in front of us.

REFERENCES:

1) http://time.com/4057000/choosing-to-wait-a-new-approach-to-breast-cancer-at-its-earliest-stages/

2) The LORIS Trial: Addressing overtreatment of ductal carcinoma in situ. Francis A et al, Clinical Oncology: 27(1):6-8, 2015 Jan.

3) CoBRA, Melbourne Australia, October 22-24, 2015