HRT prescriptions linked to 25% of breast cancers in California

To the Editor: I am a breast radiologist, running a multidisciplinary breast care centre together with two surgeons and a practitioner in oncology. We add about 90 - 100 new cancer cases to our files annually.

I am amazed to see how we doctors persist in our old ways of prescribing medicine and how reluctant we are to change, despite recent data. Our medical history is flawed with mistakes that sometimes took hundreds of years to correct (400 years to admit that vitamin C prevents scurvy, decades to admit that Semmelweis was right in washing hands and that bloodletting had no benefit). It took the USA's Food and Drug Administration (FDA) 37 years to ban diethylstilbestrol, after the first synthetic oestrogen caused vaginal cancer in female babies.

Despite many colleagues criticising the composition of the Women's Health Initiative (WHI) study[1] on hormones, it nevertheless had a major impact on breast cancer figures. Women became scared, stopped their prescriptions, and then … breast cancer figures tumbled – for the first time in 30 years[2] – and in the 1970s also dropped after the scare of oestrogen causing endometrial cancer.[3]

The Stanford University Group could find no other cause of the unprecedented drop – other than women stopping their HRT prescriptions.[4,5] A calculation by Donald A Berry, Cancer Research Professor of Biostatistics, Anderson Cancer Center, shocked us: that 25% of breast cancers in California before 2002 could have been caused by HRT prescriptions.[6] Which means that we, well-meaning doctors, caused cancer in our patients. This was 67 years after Dr Charles Dodds (inventor of the first synthetic oestrogen, diethylstilbestrol) and Dr Boris Shimkin warned that it caused cancer in their laboratory rats and that we did not know what the long-term effect might be on the human female![7]

It is high time that our patients be informed about the side-effects of prescription drugs and encouraged to make their own decisions, irrespective of whether the drug is thalidomide, Vioxx or HRT. After all, hormones are misused in a non-disease state like the menopause. How long will it take us to discard the financial gains, to admit that we are harming many of our patients, and to start changing our prescription habits?

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1. Writing Group for the Women's Health Initiative Investigators. Risk and benefits of estrogen plus progestin in healthy postmenopausal women: Principal results from the Women's Health Initiative randomized controlled trial. *JAMA* 2002; 88: 321-333.
2. Ravdin PM, Cronin KA, Howlander N, *et al*. The decrease in breast-cancer incidence in 2003 in the United States. *N Engl J Med* 2007; 356(16): 1670-1674.
3. Smith DC, Ross MD, Donovan PD, *et al*. Association of exogenous estrogen and endometrial carcinoma. *N Engl J Med* 1975; 293(23): 1259-1262.
4. Robbins AS, Clarke CA. Regional changes in hormone therapy use and breast cancer incidence in California from 2001 to 2004. *J Clin Oncol* 2007; 25: 3437-3439.
5. Ravidin PM, Cronin KA, Howlader N, *et al*. The decrease in breast cancer incidence in 2003 in the United States. *N Engl J Med* 2007; 356: 1670-1674.
6. Robbins AS, Clarke CA. Regional changes in hormone therapy use and breast cancer incidence in California from 2001 to 2004. *J Clin Oncol* 2007; 25(23): 3437-3439.
7. Shimkin MB, Grady H. Carcinogenic potency of stilbestrol and estrone on strain C3H mice. *J Natl Cancer Inst* 1940; 1: 119-128.