

## EDITORIAL COMMENT

### *Mass spectral analysis of PC-SPES confirms the presence of diethylstilbestrol – Page 1684*

When PC-SPES, a mixture of eight Chinese Herbs, hit the market in the late 1990's there was considerable fanfare and hope among clinicians and patients that this agent possessed impressive anticancer properties. Although it was clear that it induced castrate levels of testosterone, significant PSA response among men with hormone-refractory prostate cancer (HRPC) gave credence to the fact that this agent may possess non-hormonally mediated antineoplastic properties as well.<sup>1</sup>

In the early part of 2000 however, the seemingly 'sweet' story about PC-SPES began to turn sour. First came word that diethylstilbestrol (DES) had similar anticancer effects among men with HRPC as PC-SPES.<sup>2</sup> Then came word that independent chemical analyses have discovered the presence of DES within the PC-SPES mixture. Although initial analyses suggested the dose was small, the fact that DES is not a natural compound led many to suspect that 'foul play' was involved in creating PC-SPES.<sup>3</sup> The article by Guns and colleagues suggests quite strongly that DES in the quantities of 1-2 mg per day may exist in PC-SPES. This dosage is neither small nor devoid of side effects such as atheroembolic phenomena.<sup>4,5</sup> This observation, coupled with the fact that additional studies have found Coumadin in PC-SPES and Xanax in SPES (a similar mixture by the same manufacturer) raises serious questions about the regulation of herbal remedies in the marketplace. Health Canada has now removed PC-SPES from the marketplace.

Although some herbal products may help our patients, the lack of standardization of manufacturing must be recognized as a limitation. In a recent study carried out at our institution, three of six Saw Palmetto brands contained virtually no Saw Palmetto! What is the clinician to do? In my view, at the very least we should demand some form of regulation from our governments. If governments do not act, I believe that committed specialty organizations such as the AUA or CUA should strive to develop an accreditation process for over-the-counter herbals. This 'certificate program' would mandate independent chemical testing, minimal inter-lot variability and good manufacturing processes. Unless we get involved, the situation will not change.

Neil Fleshner MD, MPH, FRCSC  
Head, Division of Urology  
Head, Genitourinary Cancer Program  
Princess Margaret Hospital  
University Health Network  
Toronto, Ontario, Canada

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