

Cervical Health

Each year in the United States, approximately 12,000 women are diagnosed with cervical cancer, 1/3 of whom will lose their lives to the disease. Often going unnoticed in men, Human Papillomavirus (HPV) can be devastating to women as its high-risk strains are associated with almost all cases of cervical cancer. HPV is a very common infection that is spread through sexual activity; its incidence is so common that by the time women reach the age of 50, 4 out of 5 will have acquired the disease, though most women who become infected have no symptoms as the body's own immune system often clears the virus. HPV and the cervical dysplasias it can cause, including cervical cancer, are screened for during Pap smears and HPV tests.

It has been suggested that the 16-OH metabolite of estradiol/estrone is synergistic with the HPV virus in promoting cell proliferation and further studies indicate estrogen to be a fuel for the progression of cervical cancer. Knowing this, it is important to reduce estrogen dominance in your female population - particularly in those over 30 who are at greater risk for dysplastic changes associated with the disease.

Estrogen dominance is a relative term referring to excess estradiol in relation to progesterone and is illustrated on your patient's salivary hormone testing interpretations by the Pg/E2 ratio. When both estradiol (E2) and progesterone (Pg) levels are tested on your patients' salivary hormone panels, Labrix will calculate the Pg/E2 ratio for you. This ratio is considered within range when it falls between 200-500 and is considered optimal when it equals approximately 400 with minimal to no symptoms present. You can help your patients obtain these optimal levels in many ways:

- Supplementing progesterone when indicated
- Lowering exogenous exposure to estrogens and xenoestrogens including birth control pills
- Maintaining an organic diet high in vegetables, fruits and fiber
- Supporting a regular exercise routine
- Reducing peripheral estrogen conversion, if needed, via use of aromatase inhibitors (e.g., chrysin, luteolin and resveratrol)
- Optimizing estrogen metabolism
- Diindolylmethane (DIM) or Indole 3-carbinol (I3C) supplementation - these are compounds found in cruciferous vegetables, specifically the brassica family. These compounds affect estrogen metabolism by shifting the breakdown of E1 and E2 away from the 16-OH metabolite.
- Calcium D-glucarate supplementation - this nutrient works by reducing absorption of estrogen in the intestine, thus decreasing circulating levels of the hormone.

Interested in learning more about estrogen dominance? Consider reading the written works of John Lee M.D, including "What Your Doctor May Not Tell You about Menopause", "What Your Doctor May Not Tell You about Breast Cancer" and "What Your Doctor May Not Tell You About Premenopause".

References

- Auburn KJ, et. al. The interaction between HPV infection and estrogen metabolism in cervical carcinogenesis. *Int J Cancer*. 1991 Dec 2;49(6):867-9 National Cervical Cancer Coalition CDC