

## MANAGING OESTROGEN DEFICIENCY AFTER BREAST CANCER

S. Rozenberg, C. Antoine, B. Carly, F. Liebens, **CHU ST PIERRE, Université Libre de Bruxelles, Rue Haute 290. Brussels 1000. Belgium** [serge\\_rozenberg@stpierre-bru.be](mailto:serge_rozenberg@stpierre-bru.be)

Background: Many women with breast cancer (BC) will be diagnosed at an early stage.

Owing to recent improvements in treatment, most of them will not die from BC.

Unfortunately, however, they often suffer from the consequences of oestrogen deficiency.

Objectives: To evaluate the conditions and consequences of oestrogen deficiency and its management.

Methods: Systematic review of available data and surveys.

Results: *Conditions:* Oestrogen deficiency may occur, due to ovarian failure, following chemotherapy. In  $\pm 70\%$  of cases, women have tumours that express oestrogen receptors, for which aromatase inhibitors (AI) only (if postmenopausal), or combined with GnRH agonists (if premenopausal) are often prescribed.

*Consequences:* These regimens induce a profound state of hypoestrogenemia. According to one survey, about 65% of patients suffer from climacteric symptoms. Younger women suffer more often from vasomotor symptoms and AI users from sexual disorders. AI also results in more rapid and severe bone loss, than that seen in other postmenopausal women. Thus, BC patients also have a 5-fold higher incidence of osteoporosis than peer women of their age.

*Management:* About a third of symptomatic patients take various treatments to alleviate symptoms. It is commonly admitted that HRT and tibolone are not indicated for these patients since they increase BC recurrence risk. In AI users, even vaginal oestrogens are contra-indicated. Some evidence exists, concerning the efficacy of serotonin reuptake inhibitors and gabapentine, but there are concerns about their safety. There is a consensus that in AI users, bone mineral density and osteoporosis risk should be evaluated, and that osteoporosis treatment should be initiated at an early stage (when osteopenia combined with risk factors occurs, or in cases of severe osteopenia). The current attitude is to use Bisphosphonates, although other drugs are being developed. There is recent evidence that biphosphonates also decrease BC recurrence risk.

Conclusions: Osteopenia should be detected and treated in AI users. There is a need for the development of safe and efficacious symptomatic treatments for these patients.

Keywords: Breast cancer survivors, oestrogen deficiency, aromatase inhibitors, Bisphosphonates.