The more you treat, the more you cure? Challenging the dogma

Alberto Costa, Editor

I was lucky enough to be in the right place at the right time to witness one of the great turning points in our approach to cancer. In March 1973, a medical student at Milan University, I was assigned to the Istituto Tumori for my practical training. A medical oncologist called Gianni Bonadonna was just starting to give a chemotherapy regimen called CMF to breast cancer patients as an 'adjuvant' treatment after surgery. A surgeon, Umberto Veronesi, had just randomised his first patients to a clinical trial that would become known as the Milan I study, and would demonstrate that it is possible to achieve the same survival rates as mastectomy by removing only the part of the breast containing the tumour (quadrantectomy) and then irradiating the remaining mammary glands.

I joined Veronesi, and remained with him for another 30 years. I felt that something important was happening in that nine-storey building, in that least Italian of Italian cities.

A dogma was dying. It was becoming clear that there was no direct relationship between the amount of tissue removed and the curability of the cancer that had developed. I still saw some patients treated with an 'enlarged mastectomy', a procedure that removes both pectoral muscles, and all axillary lymph nodes – the internal mammary and the supraclavicular ones. Did these women live any longer? We now know that they did not – but their bodies were devastated.

The introduction of conservative breast surgery had an impact not only on cosmetic results, but more importantly on survival *per se*: it gave women a real incentive to seek an early diagnosis, and early cancers have in general a better prognosis.

Breast surgeons should be acknowledged for having had the courage to revise their own dogmas, and for continuing to do so, with the introduction of the sentinel node procedure (saving millions of healthy lymph nodes), the nipple sparing mastectomy and now active surveillance in DCIS. Urologists have done the same with prostate cancer, orthopaedic surgeons with bone sarcomas, general surgeons with rectal cancer, and so on, by interacting with other disciplines and combining treatments.

We need now to kill another dogma: the more you treat the more you cure. Overtreatment is everywhere, fueled by anxiety (what if they sue me?), by anecdoctal bias (I remember a case…), by the pressure of the administrators (we need to cover so many costs...), by the need to feel safe (the benefit is minimal, but just to be certain…). Will new generations have the same guts as our predecessors?