Pressure Pain Phenotypes in Women Before Breast Cancer Treatment

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About 25% of women diagnosed with invasive breast cancer experience cancer treatment–related chronic neuropathic pain (Andersen, Duriaud, Jensen, Kroman, & Kehlet, 2015; Belfer et al., 2013; Bruce et al., 2014). Chronic neuropathic pain is often poorly managed, in part because of the complexity of its assessment. Challenges in assessment include the following (Baron, 2009):

- Its presentation varies despite identical underlying mechanisms.
- It may be widespread or referred to body sites unrelated to the area of primary nerve injury, making pain location a poor indicator of true injury site.
- It can be difficult to differentiate from other acute neuropathic or nociceptive pain conditions.

Improper assessment may result in inappropriate, ineffective, and costly treatment or in analgesic or psychotropic abuse, which negatively affect the patient (Chiu et al., 2014; Macdonald, Bruce, Scott, Smith, & Chambers, 2005; Tevaarwerk et al., 2013).

Because current treatments for cancer-related chronic neuropathic pain (e.g., antidepressants, anticonvulsants) are inconsistently effective (Greco et al., 2014; Phimolsarni & Waikakul, 2015), National Comprehensive Care Network (2018) guidelines recommend individualized and comprehensive treatment for chronic neuropathic pain. Individualization may be based on disease characteristics, genotype, symptom clusters, comorbidities, biopsychosocial and demographic risk factors, and/or pain profiles (Ahmedzai, 2013; Cherkin et al., 2016). Experimental pain testing, or quantitative sensory testing (QST), has been used to determine pain profiles in patients with chronic pain (Cardoso et al., 2016; Coronado, Bialosky, Robinson, & George, 2014; Frey-Law, 2016; Vaegter & Graven-Nielsen, 2016) and to titrate individualized interventions for women with breast cancer (Axelsson, Ballegaard, Karpatschof, & Schousen, 2014). However, research...