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Correlation between quality of pain and depression: A post-operative assessment of pain after caesarian section among women in Ghana

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Background and aims: Post-operative pain after caesarean operation remains one of the major complains after delivery. With the rising rate of caesarean deliveries, the assessment and management of acute pain has become a major concern for medical professionals in Ghana. The aim was to determine the association between the neuroplasticity of pain and depression using a post-operative pain assessment among women after caesarean section in Ghana.

Methods: A descriptive pilot studies consisting of 54 women who have undergone caesarean operations and reported of acute pain after three months were conducted in King David Hospital and Neptune Medical centre. A purposeful sampling was used to complete the Numeric Pain Scale (NPS) and the Wong-Baker FACES Pain Rating Scale to justify the inclusion criteria. While the Pain Quality Assessment Scale (PQAS) and the Beck Depression Inventory (BDI) were completed by participant.

Results: On the characteristics of their pain respondents scored above 7, on average, for hot pains (7.04 ± 2.028 , minimum of 5 and maximum of 10), unpleasant pains (7.33 ± 1.907 , minimum of 5 and maximum of 10), intense and deep pain (7.35 ± 1.825 , minimum of 5 and maximum of 10) and intense but surface (7.38 ± 1.784 , minimum of 5 and maximum of 10), each with a minimum of 5 and a maximum of 10. This implies that for each of those types of pain, respondents scored very high levels of intensity. Similarly, on intensity of pain sensation (6.43 ± 1.814 , minimum of 5 and maximum of 10), sharpness of pain (6.53 ± 1.772 , minimum of 5 and maximum of 10), how dull their pains felt (6.38 ± 2.603 , minimum of 0 and



maximum of 10) sensitiveness of their skins (6.75 ± 1.9 , minimum of 4 and maximum of 10) and how itchy (6.98 ± 2.137 , minimum of 4 and maximum of 10) their skins felt with their respective standard deviations. On the depression scale, more than half of the respondents (51.9%) captured in this study had moderate depression.

Conclusions: We ultimately sought to conduct a test of association between ten indicators of quality of pain and depression. There turned out to be significant association between intensity of pain and depression ($\chi^2 = 21.507$; $p < 0.001$) simply implying that where there is a rise in intensity of pain, there is likely going to be depression. There was also a significant association between sharp sensation and depression ($\chi^2 = 31.256$).

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Dynamic and static mechanical pain sensitivity is associated in women with migraine

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Aims: To explore the association between static (hyperalgesia) and dynamic (allodynia) pressure algometry for assessing muscle pain hypersensitivity in women with migraine.

Methods: One hundred and twenty women with migraine (42% chronic, 58% episodic) participated. Dynamic muscle allodynia was assessed with a dynamic pressure algometry set (Aalborg University, Denmark[®]) consisting of 11 rollers with fixed pressure levels from 500 g to 5300 g. Each roller was moved at a speed of 0.5 cm/s over a 60 mm horizontal line covering the temporalis muscle. Dynamic pain threshold (DPT-pressure level of the first painful roller) was calculated on each side of the head. Migraine pain features were collected on a headache-diary. As golden standard, static pressure pain thresholds (PPTs) were assessed over the temporalis



muscle, C5/C6 joint, second metacarpal and tibialis anterior to assess widespread pressure hyperalgesia.

Results: Side-to-side consistency between DPT ($r=0.769$, $P<0.001$) was found. DPT was moderately associated with widespread PPTs ($0.364 < r < 0.769$, all $P<0.001$). No significant association with migraine pain features (frequency, intensity or duration of migraine attack) were observed (all, $P>0.129$). Associations were similar in women with episodic or chronic migraine.

Conclusions: Dynamic pressure algometry was valid for assessing dynamic mechanical muscle allodynia in migraine. DPT was associated with widespread static muscle hyperalgesia independently of migraine frequency supporting that dynamic muscle allodynia in the trigeminal area is consistent with generalized pressure pain hyperalgesia. Assessing dynamic deep somatic tissue sensitivity may provide a new tool for assessing treatment effects.

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The number of active trigger points is associated with sensory and emotional aspects of health-related quality of life in tension type headache

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Aims: Some evidence supports that referred pain elicited by active trigger points (TrPs) reproduces some features of tension type headache (TTH). Our aim was to investigate the association between the number of active TrPs and health-related quality of life TTH.

Methods: Patients with TTH diagnosed by experienced neurologists according to the last International Headache Classification (ICHD-III) were included. Exclusion criteria included other primary headaches, medication overuse headache, whiplash injury or fibromyalgia. TrPs were bilaterally explored within the masseter, temporalis, trapezius, sternocleidomastoid, splenius capitis, and suboccipital. Health-related quality of life was assessed with the SF-36 questionnaire including 8 domains: physical functioning, physical role, bodily pain, general health, vitality, social functioning, role-emotional, and mental health. Higher scores represent better quality of life. Spearman correlation coefficients were used to determine correlations between the active TrPs and SF-36.

Results: Two hundred and two patients (mean age: 45 ± 12 years) with a headache frequency of 17 ± 7 days/month participated. Each patient with TTH exhibited 4.7 ± 2.9 active TrPs. The number of active TrPs showed moderate weak negative associations with bodily pain ($r_s: -0.216$; $P=0.002$), emotional role ($r_s: -0.185$; $P=0.008$) and vitality ($r_s: -0.161$; $P=0.02$), but not with the remaining domains: the higher the number of active TrPs, the worse the emotional role and vitality and the higher the pain interference with daily life. These results were similar in both frequent episodic and chronic TTH.

Conclusions: The number of active TrPs was associated with sensory and emotional aspects of quality of life in a cohort of subjects with TTH.

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Chronic neuropathic pain following oxaliplatin and docetaxel: A 5-year follow-up questionnaire study



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Background: Adjuvant chemotherapy with docetaxel and oxaliplatin increases survival in patients with high-risk breast and colorectal cancer, respectively, but may induce acute and chronic neurotoxicity. This study is a 5-year follow-up of chronic chemotherapy-induced peripheral neuropathy (CIPN).

Methods: In 2011–2012, 74 patients with high-risk colorectal cancer and 100 patients with high-risk breast cancer answered a questionnaire before, during and one year after receiving adjuvant chemotherapy with oxaliplatin and docetaxel, respectively. In 2016, a 5-year follow-up with the same questionnaire was performed in survivors.

Results: Fifty-two (36.5% women) of 74 patients (91%) treated with oxaliplatin and 80 (100% women) of 100 patients (85%) treated with docetaxel answered the questionnaire. The most common symptoms of CIPN were tingling in the hands (44.2% in the oxaliplatin (CI 95% 30.5; 58.7) and 36.3% in the docetaxel group (CI 95% 25.8; 47.8)) and feet (52.0% in the oxaliplatin (CI 95% 37.6; 66.0) and 37.5% (CI 95% 29.9; 49.0) in the docetaxel group) and numbness in the feet (34.6% in the oxaliplatin (CI 95% 22.0; 49.1) and 17.5% (CI 95% 9.9; 27.6) in the docetaxel group). Pain was present in the hands or feet in 28.9% of patients treated with oxaliplatin (CI 95% 17.12; 43.0) and 31.3% of patients treated with docetaxel (CI 95% 21.3; 42.6).

Conclusions: The results showed no major change in symptoms of neuropathy or pain from 1 to 5 years after chemotherapy. Symptoms of neuropathy were more common in patients treated with oxaliplatin.

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