

Papadopoulou M, Michopoulos I, Tsivgoulis G, Palaiodimou L, Bregianni M, Voumvourakis K. Psychological factors predict electrodiagnostic studies results. *European Psychiatry* 2020;63 (S1), 629-712.

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**Abstract Introduction** There is a great amount of normal results in requested medical exams. This phenomenon has impact on financing social security on one hand and on safety issues on the other. Electrodiagnostic studies (EDX) investigate peripheral nervous system. EDX studies normally do not cost a lot because no expensive consumables are needed, but there are certain contradictions and rare adverse effects. Furthermore, because of the appliance of electric current and use of intramuscular needles there is always an amount of annoyance. In several published papers, EDX produce normal results in a high proportion ranging from 35% to 69%, raising an issue about the real need of so many referrals. Several studies have attributed this to the inappropriateness of the referral and even related it to the specialty of the referral physician. Other studies do not confirm the above notion.

**Materials and methods** The aim of our study was to investigate psychometric characteristics of the referred population and their impact on EDX result. We prospectively enrolled 100 patients that were referred for EDX study of the upper limbs and recorded their demographic, biochemical and psychometric characteristics. **Results** Normal results were elicited in 56 patients. From all factors examined, only age and numbness in right hand were statistically significant associated to EDX result. Although, women in the population study were much more than men (78%), a common finding in all relative studies, there was no statistical difference of abnormal EDX studies between men and women. Moreover, men and women did not differ in any factor except in psychometric scales, HADS-D and WHODAS. **Discussion** EDX studies might be normal because of low sensitivity of the exam for certain neuromuscular diseases, or because the underlying disease might be out of the diagnostic range of the exam (e.g. musculoskeletal problems). We attribute a proportion of normal EDX results to psychological reasons, especially among women. Women more often than men, most probably due to psychological reasons, seek for medical attention for symptoms that prove to be innocent and might reflect patients' vague agony regarding their health.

**Conclusion** The finding that women are referred more often than men although they are as healthy as they are, may give a new perspective in handling these patients, focusing not only on their reported symptoms, pain or numbness, but to the unspoken symptoms as well, anxiety or depression, that give rise to somatic complaints.