

European Association of Urology – Press Release

Study suggests personality tests may improve care for prostate cancer patients

Type of Study: Not peer reviewed/observational/on human subjects

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Barcelona: Scientists have found that men with high neuroticism – between a quarter and a fifth of men in developed countries – are significantly more likely to suffer from adverse events such as erectile dysfunction and incontinence, which may put their recovery from prostate cancer surgery at risk. The researchers say that this means cancer teams may need to consider testing for personality types to try to ensure that patients being treated for prostate cancer receive the best care. This work is presented at the European Association of Urology Congress in Barcelona.

The researchers surveyed 982 men who had undergone prostate surgery (radical prostatectomy) at the University Hospital in Oslo, Norway. 761 of the respondents reported on their recovery from the surgery while also self-reporting on neuroticism with a standard questionnaire.

22% of the men scored high for neuroticism, which is in line with the prevalence of high-neurotic personality in national surveys in Norway (22 %,) and other countries such as the Netherlands (25%). These men showed significantly worse scores when surveyed on their recovery from radical prostatectomy (*See below for notes on questionnaires).

Lead researcher, Dr Karol Axcróna (from Akershus University Hospital, Norway) said:

“Around a fifth of the men scored highly for neuroticism, which is pretty much what would be expected. These men showed significantly more adverse effects after prostate cancer surgery. We use a standard questionnaire to measure the Quality-of-Life in men after prostate cancer surgery, and on average the highly neurotic patients scored around 20% worse than the non-neurotic patients on a variety of side effects, including erectile dysfunction, urinary leakage, and bowel problems. This mirrors work which has shown the effect of personality on disease recovery in general, but we still need to see this work replicated in other studies.”

Until now differences in outcomes from prostate cancer surgery had been thought to be largely due to differences in surgical technique and the circumstances of the prostate cancer. This work shows that personality may also be a contributory factor to surgical outcomes.

Dr Axcróna continued:

“Neuroticism is not an illness, but a basic personality trait, like extraversion or openness; we all have some degree of neuroticism. What we found was that those patients who show a greater tendency towards neuroticism have worse outcomes 3 years after prostate cancer surgery. This is a real effect, and doctors need to take account of this, in the same way that we would take physical factors into account before and after cancer treatment. This means we may need better advance personality testing for identification and counselling, and perhaps a more specialized follow-up of those men who might be at risk of poorer outcomes. We believe the increased risk of adverse events is likely to impede the overall patient recovery, although the study was not designed to measure that.”

Commenting, Director of the European Association of Urology Scientific Office, Professor Arnulf Stenzl (Tuebingen, Germany) said:

“This is interesting and novel work. It would be very valuable for those affected, but it may be difficult to test all patients; so in practical terms we may need to pre-select those who are at most at risk. We know that roughly one out of five will tend to neuroticism, but we need to be more sure how this translates into postoperative clinical or psychological effects, so more we need more data.”

This is an independent comment; Professor Stenzl was not involved in this work.

**Adverse events after surgery were measured using the EPIC-26 questionnaire*

https://medicine.umich.edu/sites/default/files/content/downloads/EPIC%20Short%20Form_0.pdf

Personality was measured using the Eysenck Personality Questionnaire, see: Grav S, Stordal E, Romild UK, et al. The relationship between neuroticism, extraversion, and depression in the HUNT study: in relation to age and gender. Issues Ment Health Nurs 2012;33:777-785

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