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One-stage penectomy and phalloplasty for squamous cell carcinoma of the penis in a 42-year-old male

Salgado C J, Sputova K, Horesh E, Manfrini D and Kava B
University of Miami Miller School of Medicine, USA

Penile squamous cell carcinoma is a relatively rare malignancy in most developed nations, accounting for less than 1% of all cancers in men in the US. The majority of primary tumors originate distally on the glans or prepuce, with a minority on the coronal sulcus or shaft. Most glandular and preputial carcinomas can be treated with organ-sparing techniques to maintain functional penis for urination and intercourse. However, total penile amputation is indicated for tumors whose size or location would not permit excision with an adequate surgical margin. According to European guidelines, a total phallic reconstruction should be offered to patients undergoing total amputation. However, reconstruction is usually delayed months to years following penile amputation despite the mutilating character of this kind of surgery, which results in significant negative effects on patient's quality of life, wellbeing, and psychological health. Studies have shown pathological anxiety in more than 30%, mental illness in over 50%, avoidance behavior in over 25%, and impaired well-being in over 40% of patients. Almost half of patients in an additional study suffered from post-traumatic stress disorder. Another study reported that out of 29 patients treated with penectomy, one committed suicide and another had a failed suicide attempt. We present a 42-year-old man with a history of multiple squamous cell carcinomas of the penis who presented to us with progression of high-grade carcinoma of the penis for definitive treatment. This case report demonstrates the safety, well-tolerated oncologic outcome, and improvement in patient quality of life of performing immediate phallic reconstruction following radical penectomy.

csalgado2@med.miami.edu

Genetic profiling prostate cancer – Lessons from Africa

Vanessa M Hayes
The University of Sydney, Australia

Prostate cancer is a genetic disease, with a family history of prostate cancer a significant risk factor. Besides increased age, the only other notable risk factor has been associated with an African-ancestry. Specifically, African-American men are 1.6 times more likely to be diagnosed with prostate cancer and 2.4 times more likely to die as a result of prostate cancer than European-Americans. However, this striking disparity has as yet not been fully investigated outside the context of the United States. Initiated in 2008, the Southern African Prostate Cancer Study (SAPCS) is a unique ongoing resource to investigate clinical presentation, epidemiological and genetic risk factors, as well as associated disease progression within Black South Africans. Enrolling over 1300 men to date and compared with African-Americans, we report significantly aggressive prostate cancer defined by pathological Gleason score >7 (17% and 36%, respectively) and biochemical PSA ≥ 20 mg/L (17.2% and 83.2%, respectively)- prostate cancer is therefore a major public health concern for Black South Africans. Investigating 24 demographic and lifestyle measures, we show significant prostate cancer risk associations with a number of known factors, including additional within subpopulation ethnolinguistic classification ($p=0.0046$). The latter further expands on the genetic-basis hypothesis. Not surprisingly though, we show no evidence for risk prediction for published, largely European-defined, genome-wide association study identified prostate cancer risk alleles ($n=46$). We have more recently investigated a link to maternal inheritance and prostate cancer risk and disease outcomes within the SAPCS. We demonstrate an increased risk associated with the earliest diverged (genetically distinct) mitochondrial haplogroups, while we identify a correlation between the cumulative mutational frequency and number of somatic mitochondrial DNA mutations with aggressive prostate cancer. In conclusions, our African derived cohort is not only providing an alternative for the African-American studies, but is shedding light into the significance of both inherited and acquired genetic events driving African-ancestral prostate cancer risk and adverse disease outcomes.

v.hayes@garvan.org.au