



## Pathology/Biology Section - 2013

### G102 Forensic Pathology Considerations in the Transgender Population

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After attending this presentation, attendees will be able to describe the possibilities of cause/manner of death in the transgender population based on their reported marginalization and lifestyle risk factors. Attendees will be aware of the increased proportion of viral disease, and the importance of variable medical and/or surgical transition features.

This presentation will impact the forensic science community by increasing awareness of the challenges of postmortem examination of transgender individuals.

Transgender (TG) refers to individuals who express their gender differently than expected by society based on their natal sexual anatomy, with a range of gender variant identities. A minority have undergone "full" surgical sexual transition. Their lifestyle risk factors, as reported primarily in a large study with greater than 7,000 respondents, apply to all TGs. It is important to recognize persons who identified as transgender as there are likely to be a number of possibilities and factors contributing to death. Forensic pathologists should be aware that information about sexual identity may not be specifically sought or provided, and changes may not be obvious upon examination.

There are only a few somewhat sensational case reports on TGs in the forensic literature. Studies are logistically difficult, and there are few cohort studies.

TGs face significant barriers to medical care. For those few with insurance, it is unlikely to cover expanded recommendations for health care, or the costs of medical/surgical transgender affirmation interventions.

Disturbingly, in medical settings, 19% have been refused care, 28% reported harassment, 2% have been the recipients of violence, and 50% reported that their physicians lacked treatment knowledge. Many eschew health care, and natural conditions may be neglected.

Routine health care maintenance is not simple, because they require surveillance for conditions affecting both the natal and surgically-created sex organs, as well as conditions secondary to hormone use (the effects of which remain unclear). Up to 50% of TGs have used "illegitimate" source hormones. Some inject foreign substances for cosmesis, with possible systemic complications. Self-mutilation is common.

Rates of substance abuse (alcohol, drugs, tobacco) and psychiatric illness are significantly greater among TGs.

Almost all report bias, discrimination, "transphobia," and frequently assault. The homicide rate is unknown, although there have been prominent cases in the media (and in film). The U.S. Hate Crimes Prevention Act was expanded to include a victim's actual or perceived gender or orientation.

Analysis was performed on 33 TG individuals who presented to DOFM, Glebe, between 1993 and the present. Although this number is too small for formal epidemiological analysis, descriptive examination shows features that generally reflect the reported lifestyle risk factors.

Where known, the risk factor frequencies are cited in narrative or brackets. Fifteen percent of the deceased group had "complete" surgical transition (penectomy +/- vaginoplasty), representing 15% of the MTF group (20%) and none of the FTM group (2%). Thirty-nine percent of the deaths were due to alcohol and/or drug toxicity; 26% reported use to "cope," up to 36% in individuals involved in "underground economies" (i.e., prostitution). Fifty-one percent of the deceased group had a history of substance abuse. The suicide rate was 18% (with an astounding 41% of the surveyed group reporting suicide attempts, 25X that of the general population). Four of the group (12%) were infected with HIV, all having been routinely tested; the expected rate is 4X the national US. average, or 3.76%. Twenty-seven percent were infected with hepatitis C virus. One death, of the 27% natural deaths, was directly due to HIV disease. Seventy-two percent of the deaths occurred under the age of 50. None were homicides. The rate of unnatural death was slightly greater than 75%.

One death depicts the unusual situation of a late complication of TG surgery as a possible contributing factor to death. The deceased had thromboembolic disease on a background of unknown current estrogen use, colorectal carcinoma *in situ*, and chronic ethanolism; there was also acute and chronic cystitis/prostatitis, the latter almost certainly due to the specific anatomy of the genitalia. This case illustrates the need to identify and examine every TG case in terms of their specifically altered anatomy and physiology, as well as an awareness of their substantial lifestyle risk factors.

#### Transgender, Lifestyle Risks, Postmortem