Department of Medical Epidemiology and Biostatistics

Studies on risk factors for urinary incontinence in Swedish female twins

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ABSTRACT

Approximately half of all women in industrialized countries will experience urinary incontinence during their lifetime. Even though urinary incontinence is not a life threatening disease, it often has severe implications for daily function, social interactions, sexuality and psychological well-being. Moreover, urinary incontinence has a major impact on health economy and is increasingly recognized as a global health burden. Hence, identifying risk factors for urinary incontinence is of importance for individual women at risk, as well as for society's health care costs.

In the first study, the association between coffee and tea intake and urinary incontinence was evaluated. Women with a high coffee intake were at lower risk of overall incontinence, while no effect was observed between coffee intake and other urinary incontinence subtypes. A higher risk of nocturia and overactive bladder was found among women with a high tea intake. However, results from co-twin control analysis showed that these associations were likely confounded by familial factors.

In the second study, the effect of gestational diabetes mellitus on overactive bladder was investigated. Women with gestational diabetes mellitus had an almost two times higher odds of overactive bladder compared to women without gestational diabetes. The effect of gestational diabetes mellitus on overactive bladder was not mediated by body mass index or diabetes later in life.

In the third study, the association between depressive mood disorders (depressive symptoms and major depression) and neuroticism with urinary incontinence was investigated. In logistic regression analysis depressive mood disorders and neuroticism were positively associated with urinary incontinence. Results from quantitative genetic analysis showed that the association between depressive mood disorders, neuroticism and urinary incontinence was partly determined by genetic factors in common to the disorders.

In the fourth study, the effect of birth weight and being born small for gestational age on urinary incontinence later in life was evaluated. Results showed that birth weight and being born small for gestational age had no effect on urinary incontinence. However, women who had a low birth weight and then became overweight had a borderline statistically significant higher odds of overall and stress incontinence compared to overweight women who had a normal birth weight. This finding suggests that low birth weight in combination with elevated adult body mass index may contribute to the risk of urinary incontinence later in life.