

INCIDENCE AND REMISSION OF STRESS, URGE AND MIXED URINARY INCONTINENCE AT MIDLIFE.

Hypothesis / aims of study

Urinary incontinence (UI) is often considered as a degenerative disease that develops gradually with aging. Despite a high prevalence of UI in middle-aged women, the natural history of UI during this period is not well described. Few things are known about factors which can promote its incidence or its remission at midlife.

The aim of our study is to determine the natural history of IU at midlife and to assess the risk factors of the « de novo » incidence and remission of stress, urge and mixed urinary incontinence.

Study design, materials and methods

In order to analyse details of UI in middle-aged women, data from the GAZEL cohort study were used. Different types of UI (stress, urge and mixed) were defined according to the standardized ICS-IUGA terminology. Six samples (remission and incidence of stress UI, incidence and remission of urge UI and incidence and remission of mixed UI) were analyzed according to the status at baseline, in 2000 (continent or not) in comparison with the status at the end of the study, in 2008. An univariate and a multivariate analysis including classical potential risk factors for onset of UI (age, BMI, menopausal status, parity, hysterectomy,...) and remission on UI (urinary surgery, perineal reeducation,...) were performed using logistic regression. Statistical analysis was performed using Stata-12 software.

Results

At all, the continent status for each type of UI, in 2000 and 2008, was available in 2082 women (78.8 % of the women present at baseline). Among these 2082 women, 1116 (53.6%) were continent at baseline. Type distribution at baseline was 29.0%, 3.7% and 13.7% for stress, urge and mixed incontinence respectively. Mean age at baseline was 54.9 [54.8-55.0, 95 CI%] . During the study period, an onset of stress, urge and mixed incontinence occurred in 11.0% (n=163), 5.6% (n=113), 5.8% (n=105) respectively. The rate of remission for stress, urge and mixed incontinence over the 8 years of follow-up was 57.5% (n=347), 59.7% (n=46) and 52.1% (n=149). In the multivariate analysis, concerning the incidence of UI, only BMI was significantly associated with an increased incidence of mixed incontinence (OR=1.07 [1.02-1.12, 95 CI]). Concerning the remission of UI, only the post-menopausal status was significantly associated with a lower remission of urge urinary incontinence (OR=0.22 [0.05-0.97, 95 CI%]).

Interpretation of results

Our study suggests that in middle-aged women stress urinary incontinence is still the most frequent type of UI (with both a greater incidence and prevalence rates than urge and mixed UI). High rates of remission of all types of UI (stress, urge and mixed) confirms that UI is surely a more dynamic and a more complex phenomenon than suspected. The originality of this study is to try to clarify the factors related to IU incidence and remission in middle-aged women over a long period of follow-up. BMI is associated with a increased incidence of mixed UI. The menopausal transition is associated with a lower rate of remission only in urge IU.

Concluding message

In conclusion our data suggest that about 20% of middle-aged women could experience a new-onset of UI and that more than 50% of urinary incontinence, whatever the type could disappear.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Commission Nationale Informatique et Libertés, du Conseil National de l'Ordre des Médecins et du Comité Consultatif National d'Ethique pour les Sciences de la Vie et de la Santé. **Helsinki:** Yes **Informed Consent:** Yes