

Different incontinence types and their relation to menopausal status- a hospital based analysis of patients with urinary incontinence

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Aims of study

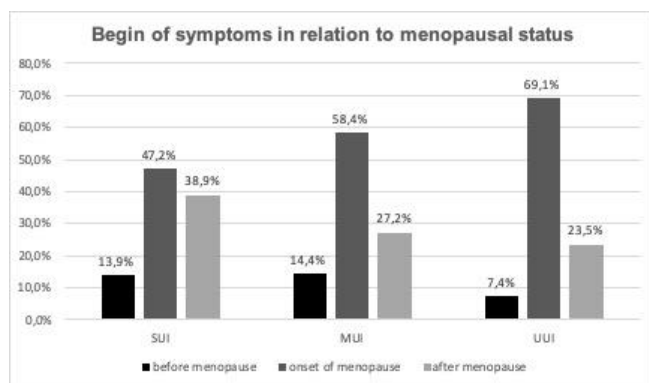
- Discussed risk factors for the development of urinary incontinence:
 - Prior hysterectomy, age, obstetric trauma, and obesity
- published data about these factors are inconsistent
- comprehensive data about risk factors in different subtypes of urinary incontinence is still lacking
- Aim:** identify risk factors for the development of the different types of incontinence in a hospital-based study
- Of special interest: influence of menopausal status on urinary incontinence, onset of incontinence in relation to menopause

Study design, materials and methods

- hospital-based retrospective analysis of patients who presented with urinary incontinence in the outpatient ward of our hospital
- diagnosis of urinary incontinence was based on the subjective complaints of the patients
- complaints of the patients were registered by using a modification of the long version of the ICIQ – Questionnaire
 - Stress urinary Incontinence (SUI) was defined as the involuntary loss of urine when the intra-abdominal pressure was increased by coughing, sneezing, or body movement
 - Urgency urinary incontinence (UII) was the fact that patients would lose urine without any control nearly immediately with the first feeling of urgency
 - Mixed urinary incontinence (MUI) was defined as loss of urine during coughing and sneezing associated with UII
- Data concerning menopausal status, hormone therapy, prior incontinence surgery, prior hysterectomy were assessed

Results

- n= 620
- age, menopausal status and age at onset of UI** significantly different between the groups
- mean age in which complaints began was significantly lower in the SUI group (45.4 years) compared to the MUI (51.0 years) and UII group (54.7 years) ($p < 0.001$)



	Overall cohort	SUI	MUI	UII	p-value
Age (years)	62.1 (12.8)	53.8 (13.2)	62.7 (12.4)	66.1 (10.9)	<0.001
Spontaneous delivery (%)					0.648
0	10.8	6.3	11.8	10.2	
1-2	62.2	63.7	61.5	64.3	
≥3	26.9	30.0	26.7	25.5	
Menopausal status (%)					<0.001
Premenopausal	18.4	46.3	15.3	8.9	
Postmenopausal	81.6	53.7	70.5	91.1	
Prior hysterectomy (%)					0.003
Yes	50.2	32.9	53.7	49.5	
No	49.8	67.1	46.3	50.5	
Subgroup analysis of postmenopausal patients					
Age at begin of menopause	49.0 (5.08)	49.2 (4.5)	48.8 (5.1)	49.5 (5.07)	0.457
Hormone replacement therapy (%)					0.950
Yes	38.5	36.4	38.6	39.1	
No	61.5	63.6	61.4	60.9	

Interpretation of results

- younger age and premenopausal status at the time of presentation were accompanied by milder form of UI (stress UI)
- menopausal status itself has no influence on the onset of UI symptoms
- Age related changes may lead to different types of incontinence

Concluding message

- current analysis shows characterizing factors of different types of urinary incontinence
- further comprehensive analysis of age related changes should be focused to identify further risk factors in order to implement preventive measures