

## OPERATIVE MANAGEMENT RESULTS OF THE FEMALE URINARY INCONTINENCE TREATED BY THE MARSHAL-MARCHETTI-KRANTZ TECHNIQUE

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Recently, urinary incontinence (UI) is one of the most frequent diseases and reasons for operative intervention in gynecological practice. Although 8-9 etiological variations and about 50 kinds of operations for UI correction are known, one of the most effective technique treating the most frequent type – urinary stress incontinence (USI) is the method of Marshal-Marchetti-Krantz (MMK) described in 1949 (cited after 2). Symonds et al. (1981) report the same technique applied to 50 patients, 38 of which with USI. It is to be noted that 25 of these patients have undergone a total of 40 gynecological operations without any improvement prior to this study (6). Excellent results are obtained in 81 per cent of patients operated (6). Since then there are numerous communications in the literature available, concerning successful operations performed by using of this technique. The relative share of favourably influenced patients varies between 80 and 97 per cent when immediate results are concerned (3-5).

The aim of the present investigation is to follow-up the results from the operative treatment of female UI after MMK technique in combination with colpoperineolevatorplastics while in younger women uterus is reserved together with an abbreviation of sacroidal ligaments of the uterus.

### Material and Methods

A total of 59 females were operated for USI for a 2-year period in the Department of Obstetrics and Gynaecology of the Higher Institute of Medicine, Varna. The MMK operation combined with colpoperineolevatorplastics was used but in young females uterus was reserved together with an abbreviation of sacroidal ligaments of the uterus. Mean age of patients operated was  $47.2 \pm 1.3$  years (between 34 and 61 years). Therapeutic effect was read by following-up of the changes of genital statics (eventually appearance of relapse) for 2 years after intervention. A comparison was made with the effect of UI treatment by other surgical methodes reported previously (1). Our results were processed after the method of non-parametrical analysis.

### Results and Discussion

The results obtained are presented on table 1.

When interpreting the immediate results it stresses that relative share of patients operated without any complications prevails (89.8 per cent). In 1967, T.N. Jeffcoate reports 80 per cent successful early results when in analogous study only well-indicated cases are analysed. In 1981, O. Kaser establishes successful results in 90 per cent of early evaluated cases. H.A. Hirsh (1980) reports a good clinical influencing of 97 per cent of patients operated after a 6-week follow-up.

Table 1  
Results from the operative treatment of females with UI

Results	Without complications		With complications					
			bleeding		dysuria complaints		other	
	n	%	n	%	n	%	n	%
immediate	53	89.8	5	8.5	1	1.7	—	—
late (up to 2 years)	59	100.0	—	—	—	—	—	—

With 5 of our patients (8.5 per cent) during removal of the urinary bladder in spatium Retzii intraoperatively a stronger bleeding is observed hampering the operative intervention and thus an additional drainage is necessitated. Persistent dysuria complaints with one patient necessitate the administration of uroseptic drugs and physical therapy as part of complex treatment.

Advantages of this operative method are well-outlined when 2-year follow-up is concerned as well as when we compare them with the results from our previous investigations. When we have in mind complications of other operative techniques aiming female UI correction, such as Mayo operation, Manchester operation, etc., where complication rate is between 5.5 and 12.5 per cent, it is evident that this method used can be recommended. However, it is possible that lack of relapses registered is due to the relatively short observation period (2 years only) as well as to the specifying of indications by means of elevation test (stress-test).

USI treatment by the method of MMK combined with colpoperineolevatorplastics and in young females with uterus reserving together with an abbreviation of sacrospinous ligaments of the uterus is clinically very effective, indeed. Relative share of immediate (predominantly intraoperative) complications is rather small. Late complications (up to 2 years) and relapses are not observed which allows us to recommend the operative intervention after MMK as the most effective method of treatment of USI always combined with colpoperineolevatorplastics and in young females with uterus reserving together with an abbreviation of sacrospinous ligaments of the uterus.

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## РЕЗУЛЬТАТЫ ОПЕРАТИВНОГО ЛЕЧЕНИЯ СТРЕССОВОГО НЕДЕРЖАНИЯ МОЧИ У ЖЕНЩИНЫ ПО МЕТОДУ МАРШАЛ-МАРЧЕТТИ-КРАНТЦ

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### Р Е З Ю М Е

Прослеживаются результаты операций по поводу стрессового недержания мочи у 59 женщин. Операции проведены по методу Маршал-Марчетти-Крантц в комбинации с коллоперинселеваторопластикой, а у молодых женщин – с сохранением матки и сокращением связок матки с крестцом.

При проведенном наблюдении в течение двух лет не было зарегистрировано непосредственных осложнений (с исключением кровотечения во время операции у пяти женщин и дизурии у одной женщины), а также и поздних осложнений.