

# Incontinence in Pregnancy

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## Abstract

## INTRODUCTION

Incontinence in pregnancy is not highlighted as a problem, as it is overlooked by other pressing problems and their events. There are a lot of physiological changes that happen during pregnancy, in the lower genital tract, that increases the risk of incontinence. There is a 50% hike in the glomerular filtration rate in the kidney with increase in the urine output to 90-100 ml per hour. The renal calyces also dilate predominantly on the right side. Renal blood flow increases by 30% with the pressure from the gravid uterus decreasing the functional capacity of the kidney.

## DISCUSSION

One of the main causes for the incontinence is the pudendal damage secondary to childbirth. There can also be incontinence in pregnancy due various other reasons. In the Nun study, 50% of the sample surveyed complained of incontinence, of which 30% had SI, 24% had UI, and 35% had mixed symptoms. So it's thought that neuromuscular damage and collagen deficiency are the main contributors to the increased incidence of urinary incontinence in these women. Apart from the intrinsic damage in pregnant women, there is pregnancy related trauma that aggravates the risk. Progesterone is found to increase the detrusor over-activity and this is the cause of increased incontinence in women during their luteal phase, pregnancy, and those who are on the oral contraceptive pill. In a prospective study, 32% of 305 primiparas developed stress incontinence during pregnancy and 7% after delivery. One year after delivery, only 3% reported SI. However 5 years later, 19% of these women, with no symptoms after the first delivery, developed SI later. So it is crucial to identify these high risk women in their antenatal period and offer them support and guidance.

The key issues in identifying women at risk of developing incontinence are Obesity, Multiparty, Vaginal delivery, regional anaesthesia, women with excessive bladder neck mobility, prolonged second stage, big baby, episiotomy and

other tears and women who have instrumental delivery. In addition there is evidence of other risk factors, such as preconceptional incontinence and antenatal bladder neck mobility, which indicates possibility of pelvic floor weakness in the development of incontinence. This should alert us to foresee the problems that may arise in them.

Studies have confirmed that forceps delivery doubles the incidence of incontinence. Forceps and ventouse deliveries have been associated with bladder and bowel complication rates of up to 50% at 5 years and pose a particular risk of injury to the anal sphincter mechanism in primiparous vaginal delivery. Caesarean section does prevent the risk of incontinence but less so than at three months post partum, with a relatively greater effect with increasing parity. Elective caesarean section has become safe for the mother and the baby, those performed at second stage of labour has considerable morbidity. At term, 4% of women with otherwise uncomplicated pregnancies require instrumental or caesarean section in the second stage of labour. Randomised control trials has confirmed, routine episiotomy, which was once recommended, is out of fashion in preventing incontinence reflecting poor sexual function in patients, with little help in protecting the pelvic floor strength. Breast-feeding is found to increase the risk though transiently due to varieties of hormonal changes. Smoking is also found to increase the risk primarily due to associated chronic bronchitis and recurrent coughing with poor tissue healing. Obesity is a major risk factor as it is hypothesized that excessive weight places extra pressure on the pelvic floor impeding the outlet. Antenatal incontinence is a significant indicator of postpartum and future incontinence. So identifying women at risk will help in counselling and providing them with preventive strategies.

Incontinence usually occurs within the initial 3-6 months after delivery, though in some cases it may occur even later. Identifying these high-risk women is crucially important as

they can be focussed and treated at an early stage. Those who have longer duration of symptoms in the post partum period are at risk of developing long-term symptoms later in life. Identifying and counselling these women will make them to be aware of the anticipated problems and to get early help. Referral to a physiotherapist with an early start of pelvic floor exercises will prevent any need for surgery in these women.

Pelvic floor exercises have good outcomes and are found to be successful in 56 - 75% of cases. It increases the muscle strength and hypertrophy thereby improving urethral compression and support. It is recommended as the first line treatment for stress incontinence. It is ideally recommended for women with mild to moderate incontinence, for those where surgery is inappropriate and for those women wishing future pregnancy. The main factor associated with success seems to be the compliance and motivation rather than age and severity of disease. Other factors associated with compliance depend on the perception of their ability to contract pelvic floor, severity of incontinence and life style changes. It crucially depends on the therapist – patient relationship and possibility to use other methods.

## **CONCLUSIONS**

Having known that incontinence is a chronic health problem that reduces the quality of life and has a lot of implications on the social, domestic, physical and leisure activities, it is vitally important to identify the problems in the antenatal groups and encourage them to rectify the problem thereby preventing future disease. It is the responsibility of the patient's family physician and obstetrician, liaising with the physiotherapist, in identifying the risk as part of the antenatal care and impose least damage in labour to allow the pelvic floor recover to it's best.

## **References**

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