

## EVALUATION OF THE SYMPTOMS AND IMPACT OF URINARY INCONTINENCE AFTER ACTIVE BIRTH WITH INTERNATIONAL CONSULTATION ON INCONTINENCE-QUESTIONNAIRE: SHORT FORM (ICIQ-SF)

### Aims of Study

International Consultation on Incontinence Questionnaire: Short Form (ICIQ-SF) is a brief and statistically potent questionnaire for the assessment of quantification of incontinence and its impact on quality of life (QOL). The ICIQ-SF has been shown to be strong and psychometrically reliable with replication in Japan. We intended for use ICIQ-SF in incontinence research of symptoms and QOL after Active Birth. Active Birth is defined as the independent childbirth of a woman herself who is having a child both physically and mentally. Regarding the point of attention to pelvic floor, a woman in childbirth is in a free position during the progression of delivery. And an episiotomy is not done as safety as possible.

### Methods

The subjects were women who were delivered of their babies with the way of Active Birth in Shonan Kamakura General Hospital in Japan from April 2002 to February 2003. All women made answer to ICIQ-SF on 1month health checkups after deliveries. Furthermore they made answer to additional questionnaire which contained questions about frequency of incontinence before and during pregnancy and frequency of fecal incontinence at that time. All women agreed with this investigation.

### Results

Total number of women was 469. The average age was 31.3 (The standard deviation was 4.43. The minimum was 16. The maximum was 42.) The average delivery number was 1.51. (The standard deviation was 0.67. The minimum was 1. The maximum was 4.) Table.1 shows the degree of incontinence with total scores of ICIQ-SF. And Table2,3,4 show frequency score, volume score and QOL score of incontinence in ICIQ-SF respectively.

Table 1- The distribution of number and percentage of total scores of ICIQ-SF

Total ICIQ-SF Score	0~3 mild	4~6	7~9	10~12	13~15	16< severe
Number of people	379	70	15	4	1	0
Percent of people	80.8%	14.9%	3.2%	0.9%	0.2%	0%

Table2-The distribution of number and percentage of frequency score in ICIQ-SF.

Frequency score of incontinence	0 none	1	2	3	4	5 always
Number of people	358	72	18	13	7	1
Percent of people	76.30%	15.40%	3.84%	2.77%	1.49%	0.20%

Table3-The distribution of number and percentage of volume score in ICIQ-SF.

Volume score of incontinence	0(none)	2(small)	4(medium)	6(large)
Number of people	358	108	3	0
Percent of people	76.33%	23.03%	0.64%	0%

Table4-The distribution of number and percentage of QOL score in ICIQ-SF.

QOL Score of incontinence	0 (no effect)	1~2	3~4	5~6	7~8	9~10 (severe effect)
Number of people	385	71	8	2	3	0
Percent of people	82.09%	15.14%	1.7%	0.43%	0.64%	0%

Table.5 shows the frequency of incontinence before and during pregnancy and the frequency of fecal incontinence 1 month after delivery.

Table 5- The rates of incontinence before and during pregnancy and fecal incontinence after delivery

Frequency score of incontinence	0	1	2	3	4	5
Before pregnancy	93.50%	4.55%	0.87%	0.65%	0.43%	0%
During pregnancy	42.50%	21.90%	15.30%	8.40%	11.90%	0%
Fecal incontinence after delivery	99.40%	0.60%	0%	0%	0%	0%

### **Conclusions**

This study shows the facts as follows.

1: The frequency of urinary incontinence 1month after delivery with the way of Active Birth was 23.7%. This frequency was almost same as the frequency which were reported in previous papers.<sup>1)</sup>

2: Low volume score(0and2) accounted for 99.3%and low QOL score(0,1 and 2) accounted for 97.2%. As the result, low total score of ICIQ-SF (0~6) accounted for 95.7%. The degree of urinary incontinence after Active Birth was inclined to be mild consequently.

3.The frequency of fecal incontinence was very low after delivery with the way of Active Birth.

### **References**

1)Lars Viktrup :The Risk of Lower Urinary Tract Symptoms Five Years After the First Delivery. Neurourology and Urodynamics 21:2-29(2002)