Results

Due to the sphincter edema and hematoma at 6 days postpartum no clear clinical and sonographic assessment about the quality of the repair could be made. The measurement of the thickness of the external and internal sphincter revealed a decrease (p<0,025) in thickness within 6 weeks (pp: Internus 3.3±1.1mm – Externus 8.8±2.3mm / 6 month pp: Internus 2.1±0.9mm – Externus 5.5±1.8mm).

	3-6 days pp	6 weeks pp	6 month pp
no symptoms	34	29	26
incontinence of gas	9	25	41
incontinence of stool	4	8	6
urgency stool	2	8	17
perineal pain	61	38	28

(detail in %)

The quality of the repair did not correlate with the symptoms of incontinence. Six months pp 20% (n=10) showed good clinical and sonographical results, 53.1% (n=26) showed good clinical but unsatisfying sonographical results, and 22.4% (n=11) had clinical problems with good sonographical results, two women had both, unsatisfying clinical and sonographical results. That means half the women had unsatisfactory anatomic results after 6 months.
We detected a defect of the sphincter in 31 women (30.4%) in the control group.

Conclusions

Our results have shown only conditionally correlation between the clinical and sonographical findings. Because of the unsatisfactory anatomical results of primary repair and only partial recovery in 53.1% of the women, it should be reconsidered optimizing the operation technique by overlapping of the sphincter instead of end-to-end anastomosis. The good clinical findings in spite insufficient sphincter repair as shown by ultrasound could be explained by assuming that the puborectalis loop is used as a functional compensation. Functional disorders and morphological defect healing are inevitable in spite of recognizing and repair of third degree rupture. As sphincter defects often go together with levator defects, the surgical repair should always be accompanied by physiotherapy of the whole pelvic floor. The complaints after sphincter defects are often seen as late as after months or years so that even after primary repair a prolonged medical care one year and longer is necessary. The endoanal sonography has shown to be a good method for perioperative monitoring. In our current study, the comparison between the endosonography and the magnetic resonance imaging and tonometric measurements will show whether there can be find a better correlation among clinical symptoms and morphological findings.

1) Int J Colorect Dis (1994) 9: 110-113

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A FIVE YEAR PROSPECTIVE RANDOMISED URODYNAMIC STUDY COMPARING OPEN & LAPAROSCOPIC COLPOSUSPENSION.

AIMS: To compare two groups of women who have been randomised into laparoscopic and open colposuspension five years after operation.

PATIENTS AND METHODS: Sixty women with urodynamically proven moderate or severe GSI were randomised to open and laparoscopic colposuspension. Both groups had similar age, degree of GSI, length of symptoms, drop-out rate (Lap = 7, Open=6), parity and HRT usage. An identical technique using 4x1-0 polygycholic sutures was used in both operations. The women were analysed before the operation and at 6, 12, 36 and 60 months. Analysis was by subjective visual analogue score, Pad test, urinary diary, Videocystourethrography and Urethral Pressure Profile.

RESULTS: Visual analogue scores of symptoms were done:

* = Open # =Laparoscopic Sig = p<0.05

Frequency:	Preop:0	*# 10
	6 mths0	*# 10
	12mths0	* # 10
	36mths0	* # 10
	60mths0	* # 10 Sig
Urge Incont	Preop:0	*# 10
	6 mths0	# * 10
	12mths0	*# 10
	36mths0	*# 10
	60mths0	*# 10
Stress Incont	Preop:0	*# 10
	6 mths0*	# 10
	12mths0*	# 10 Sig
	36mths0 *	# 10 Sig
	60mths0 *	# 10 Sig

Pad Weighing Test: (Mean 2hr test) * = p<0.05

	Preop	6mths	12mths	36mths	60mths
Open:	22g	1g	2g	3g	5g
Lap:	24g	5g	12g*	14g*	15g*

Urinary Diary: (Mean no. of leaks/day) * = p<0.05

	Preop	6mths	12mths	36mths	60mths
Open:	12	0	2	2	3
Lap:	13	2	6*	8*	9*

Videocysourethrography: * = p<0.05

	Preop	6mths	12mths	36mths	60mths
Residual-open	24ml	42ml	40ml	42ml	49ml
Residual-lap	21ml	33ml	30ml	26ml	32ml
Peak flow-open	34ml/s	24ml/s	28ml/s	24ml/s	26ml/s
Peak flow-lap	33ml/s	29ml/s	31ml/s	30ml/s	32ml/s
Maxpdet cmH_2O	5	7	6	6	7
Maxpdet -lap	5	5	5	6	8
GSI -open	30	1	1	2	3
GSI –lap	30	4	8*	12*	13*
MUCP cmH_2O	31	64	59	52	56?
MUCP –open	31	51	41*	38*	42?

(? Different machines)

CONCLUSIONS: After five years the results of the laparoscopic colposuspensions are considerably worse than the open colposuspensions.

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TREATMENT OF INTRINSIC SPHINCTER DEFICIENCY USING AUTOLOGOUS EAR CARTILAGE AS A PERIURETHRAL BULKING AGENT

AIMS OF STUDY: Bulking agents for intrinsic sphincter deficiency (ISD) are subject to foreign body response and biodegradation. The study objective was to evaluate use of autologous ear cartilage for harvest, growth in tissue culture, and periurethral injection.

METHODS: Women with documented ISD and bladder neck immobility had biopsy of auricular cartilage. Cells were expanded in vitro, formulated with alginate hydrogel, and cross-linked by the addition of calcium salts to form an injectable gel. Between September 10/97 and May 15/98, 32 patients (average age 60.9 years) received a single outpatient treatment by the transurethral technique to visually occlude the bladder neck. Outcome measures included voiding diary, quality of life scores, incontinence severity grading, and pad weight testing. Urodynamic testing was performed at baseline, and postoperatively at 3 and 12 months.