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.

RESULTS: Average biopsy weights were 0.149 g (range 0.084 to 0.227), average number of cells isolated was $931x10^6$ (range 380-$2110x10^6$), and average culture days 47.8 (range 41-60). Volume of material injected was 5.9 ml (range 3-11.6). Average pad use declined from 17 at baseline to 6 at 6 months, and incontinent episodes declined from 19 to 5, with only 9 patients having more than 3 leak episodes per day. Pad weight testing decreased from 20.6 gm at baseline to 3.7 gm at 3 months, and 0.8 gm at 6 months. There was a decrease in social impact scores from baseline to six months for physical recreation, emotional health, and feeling frustrated. Incontinence severity grading indicated 17 patients dry, and 10 improved at 6 months for a total of 27 of 32 (84%) dry and improved after one treatment. Only seven patients had a pad weight test over 2 gm. Current data indicates continued effectiveness at one year.
CONCLUSIONS: Endoscopic treatment of ISD with autologous chondrocytes is safe and effective. There is persistence of improvement at 12 months. Material may be conserved for a second injection if the initial treatment is not totally curative. Longer follow-up and comparative studies are needed to document the extended duration of effect compared to current bulking agents. (Supported by Reprogenesis, Inc, Boston, MA)

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GAX COLLAGEN OR MACROPLASTIQUE DOES IT MAKE A DIFFERENCE?

Introduction: Glutaraldehyde cross-linked (Gax) collagen and microparticulate silicone Macroplastique (MP) are used as bulking agents in the treatment of stress incontinence. GAX collagen is a purified bovine dermal collagen cross-linked with glutaraldhyde and dispersed in phosphate-buffered physiological saline. Macroplastique consists of textured silicone particles suspended in a liquid gel (polvinylpyrrolidone). The aim of this study was to compare the use and efficacy of the two substances in the treatment of female stress incontinence in a prospective randomised trial.

Methods: Women urodynamically diagnosed with moderate or severe urethral sphincter incompetence were randomised to either Gax or Macroplastique. The women included in this study were either unfit for major surgery or had undergone surgery which had failed. Women with detrusor instability, voiding difficulties, recurrent urinary tract infection or gross vaginal prolapse were excluded. Assessment involved a disease specific Quality of Life (QoL) questionnaire and a one hour pad test with a prefilled bladder of 250mls. Assessments were made prior to injection and again at one month, six months and twelve months. Objective improvement was defined as a reduction greater than 50% of the pre-treatment loss and cure was defined as a loss of <2g. Women who failed at any visit were offered another injection, up to a maximum of three. The injections were performed paraurethrally for both Gax collagen and Macroplastique.

Results: Sixty-two women were recruited, two women, both of whom had Gax were withdrawn due to protocol violations and have not been included in the analysis. Of the remaining sixty, twenty-six had Gax and thirty-four had MP. Their mean age was sixty-seven years (range 45- 88 years). Nineteen women (9-MP and 10-Gax) were considered unfit for major surgery and 41 (25-MP and 16-Gax) had had previous failed continence surgery. These women had undergone on a mean of 2.1 (range