


MANSFIELD TECHNICAL BULLETIN


Number 1

VALVULOPLASTY

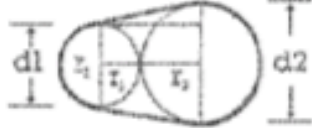
DUAL BALLOON EQUIVALENTS



Area Method 1
 Formulae: $r_1 = d_1/2$
 $r_2 = d_2/2$
 $Area_1 = \pi r_1^2 + \pi r_2^2$



Area Method 2
 $\frac{Area_1}{2} + (r_1 + r_2) d_1$
 $+ (r_1 + r_2)(r_1 - r_2)$



Maximal Circumference
 $\frac{Circ = \pi(d_1 + d_2) +}{2}$
 $2 \sqrt{(r_1 - r_2)^2 + (r_1 + r_2)^2}$

KEY:		Balloon d1						
		10	12	15	18	20	23	25
Area 1	10	14.1	15.6	18	20.6	22.4	25.1	26.9
	Area 2	15.4	16.6	19	21.5	23.2	25.7	27.4
		Circ	16.4	18	20.6	23.3	25.1	27.8
12	15.6	17	19.2	21.6	23.3	25.9	27.7	
	16.6	18.1	20.4	22.8	24.5	27	28.6	
	18	19.6	22.1	24.7	26.5	29.2	31	
15	18	19.2	21.6	23.4	25	27.5	29.2	
	19	20.4	22.6	24.9	26.5	28.9	30.6	
	20.6	22.1	24.5	27	28.8	31.4	33.1	
Balloon d2	18	20.6	21.6	23.4	25.5	26.9	29.2	30.8
	21.5	22.8	24.9	27.1	28.7	31	32.6	
	23.3	24.7	27	29.5	31.1	33.6	35.4	
20	22.4	23.3	25	26.9	28.3	30.5	32	
	23.2	24.5	26.5	28.7	30.2	32.5	34	
	25.1	26.5	28.8	31.1	32.7	35.2	36.9	
23	25.1	25.9	27.5	29.2	30.5	32.5	34	
	25.7	27	28.9	31	32.5	34.7	36.2	
	27.8	29.2	31.4	33.6	35.2	37.6	39.3	
25	26.9	27.7	29.2	30.8	32	34	35.4	
	27.4	28.6	30.6	32.6	34	36.2	37.7	
	29.6	31	33.1	35.4	36.9	39.3	40.9	



Mansfield

Dual Balloon Equivalents
 Mark L. Strucker, M.D.
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