

# **Women have a Two-fold Higher Risk for Developing Cardiac Tamponade during AF Ablation Procedures: Results from a Multicenter International Survey in 34,943 Cases.**

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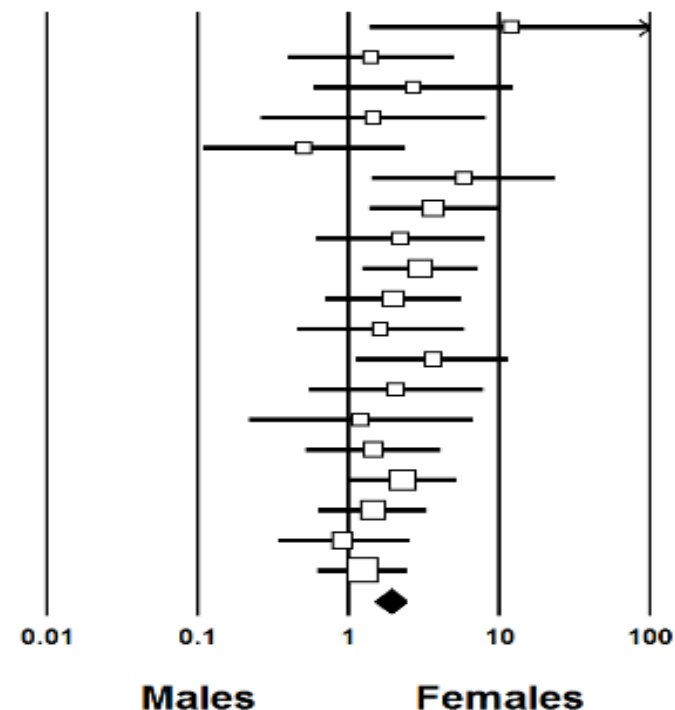
No Disclosures

Institution	Total Procedures	Tamponades	%	M	F	Tamponade M	%	Tamponade F	%
1	264	6	2.27	183	81	1	0.55	5	6.17
2	264	11	4.17	187	77	7	3.74	4	5.19
3	429	7	1.63	334	95	4	1.20	3	3.16
4	857	6	0.70	637	220	4	0.63	2	0.91
5	893	12	1.34	641	252	10	1.56	2	0.79
6	990	8	0.81	841	149	4	0.48	4	2.68
7	1020	20	1.96	616	404	6	0.97	14	3.47
8	1067	10	0.94	818	249	6	0.73	4	1.61
9	1117	21	1.88	809	308	10	1.24	11	3.57
10	1267	15	1.18	876	391	8	0.91	7	1.79
11	1376	10	0.73	975	401	6	0.62	4	1.00
12	1432	15	1.05	808	624	4	0.50	11	1.76
13	1504	9	0.60	1083	421	5	0.46	4	0.95
14	2751	6	0.22	1946	805	4	0.21	2	0.25
15	2923	19	0.65	2349	574	14	0.60	5	0.87
16	3356	24	0.72	2210	1146	13	0.50	11	1.13
17	3498	24	0.69	2344	1154	14	0.60	10	0.87
18	4259	24	0.56	3315	944	19	0.57	5	0.53
19	5676	42	0.74	4289	1387	30	0.70	12	0.87
Total	34943	289	0.83	25261	9682	169	0.67	120	1.24

Table 1: Study patient cohort and incidence of cardiac tamponade among the participating centers.

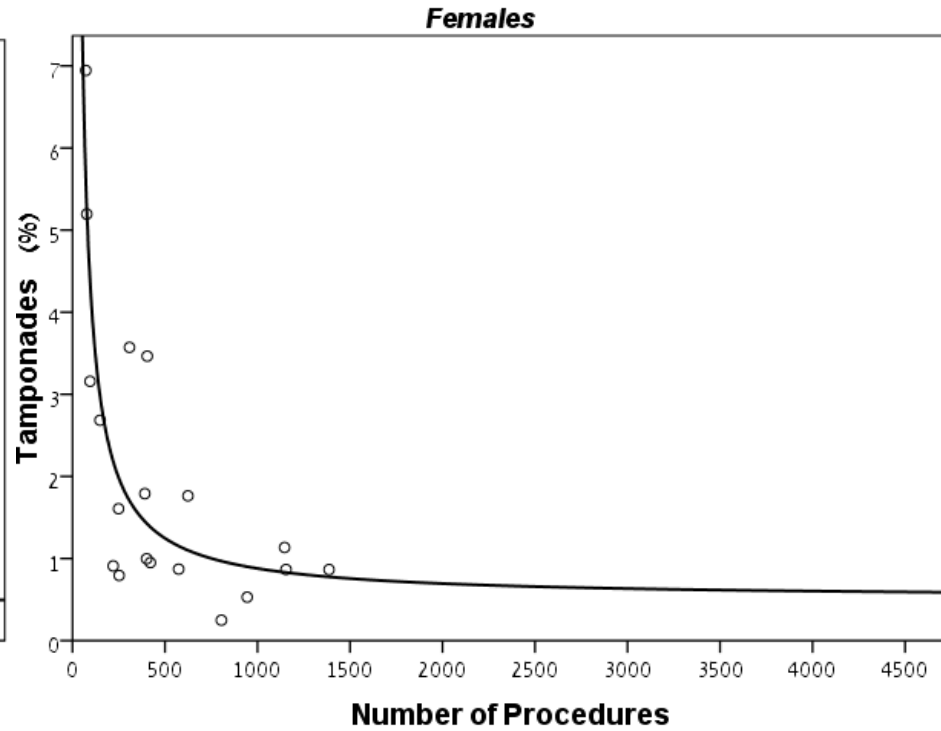
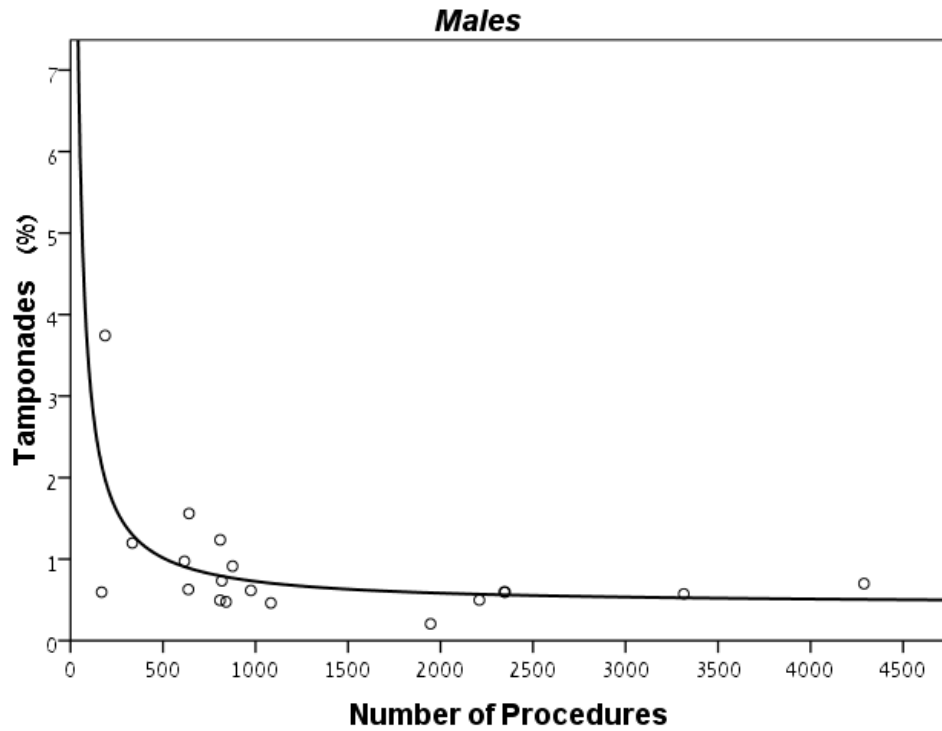
## Number of Tamponades in Females vs. Males

Study name	Statistics for each study					Females / Total		Odds ratio and 95% CI
	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value	Tamponades	Controls	
Institute 1	11.974	1.376	104.206	2.249	0.025	5 / 6	76 / 258	
Institute 2	1.409	0.400	4.958	0.534	0.593	4 / 11	73 / 253	
Institute 3	2.690	0.592	12.235	1.281	0.200	3 / 7	92 / 422	
Institute 4	1.452	0.264	7.982	0.429	0.668	2 / 6	218 / 851	
Institute 5	0.505	0.110	2.320	-0.878	0.380	2 / 12	250 / 881	
Institute 6	5.772	1.428	23.340	2.459	0.014	4 / 8	145 / 982	
Institute 7	3.650	1.391	9.577	2.630	0.009	14 / 20	390 / 1000	
Institute 8	2.210	0.619	7.893	1.220	0.222	4 / 10	245 / 1057	
Institute 9	2.959	1.244	7.040	2.454	0.014	11 / 21	297 / 1096	
Institute 10	1.978	0.712	5.493	1.309	0.191	7 / 15	384 / 1252	
Institute 11	1.627	0.457	5.797	0.751	0.453	4 / 10	397 / 1366	
Institute 12	3.607	1.143	11.382	2.188	0.029	11 / 15	613 / 1417	
Institute 13	2.068	0.553	7.739	1.079	0.280	4 / 9	417 / 1495	
Institute 14	1.209	0.221	6.615	0.219	0.827	2 / 6	803 / 2745	
Institute 15	1.466	0.526	4.086	0.731	0.465	5 / 19	569 / 2904	
Institute 16	2.294	1.024	5.136	2.018	0.044	13 / 24	1133 / 3332	
Institute 17	1.455	0.644	3.285	0.902	0.367	10 / 24	1144 / 3474	
Institute 18	0.924	0.344	2.480	-0.157	0.875	5 / 24	939 / 4235	
Institute 19	1.239	0.633	2.427	0.625	0.532	12 / 42	1375 / 5634	
	1.891	1.474	2.426	5.007	0.000			

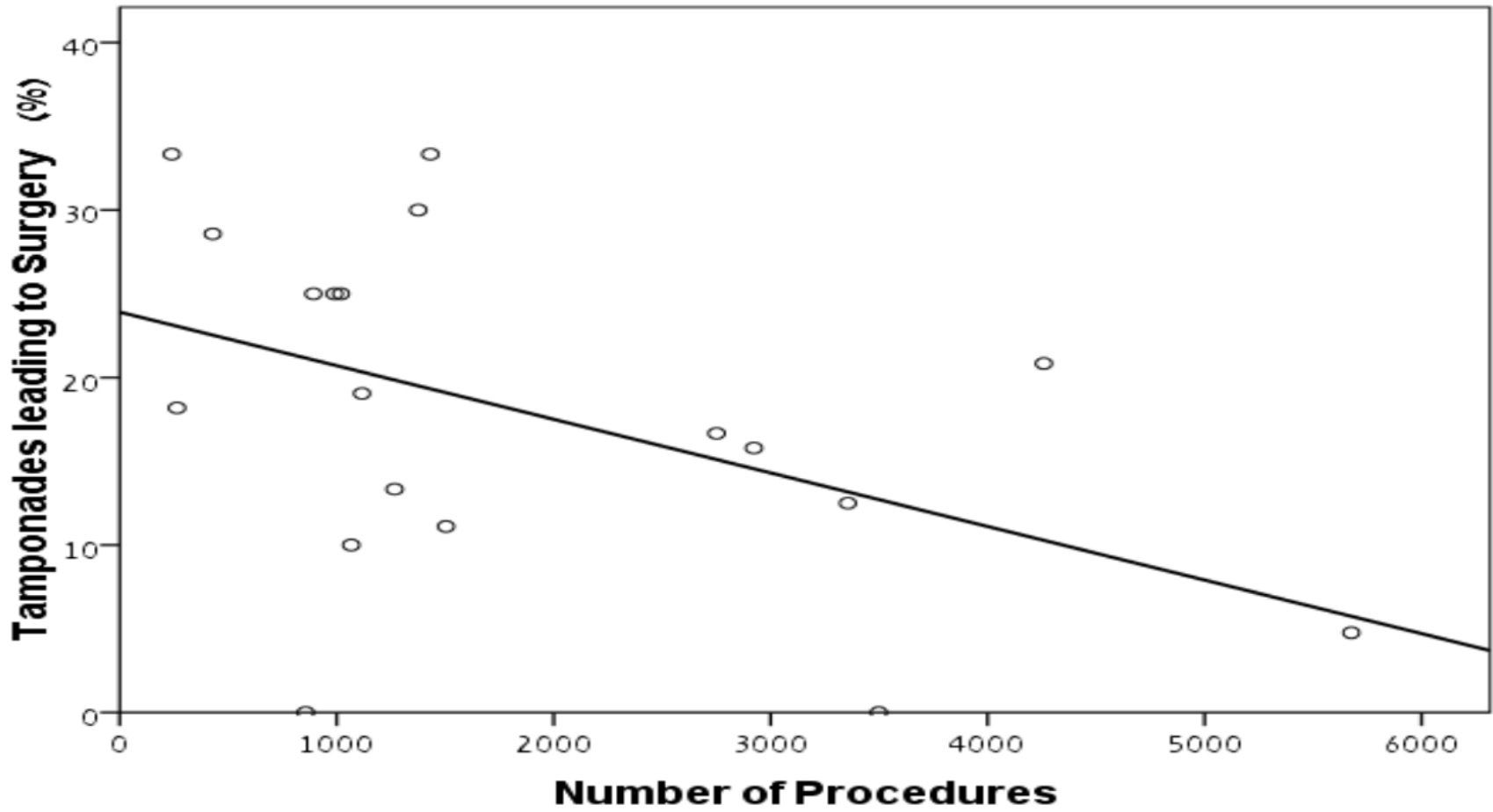


Meta Analysis

# Tamponades in relation to Center Volume



# Tamponade management in correlation to center volume



# Conclusions

- This large scale multicenter survey demonstrates a 90% higher risk of tamponade during AF ablation among women
- Rate of tamponade is low among skilled academic centers and it decreases with higher center experience (in both genders).
- Both, gender and center experience affects tamponade risk