



Graft survival after adjustable gastric banding: a nationwide study on administrative data issued from the French National Health Service Database on 52.800 patients.

Lazzati A, Paolino L, Martini F, AzoulaDy , Gugenheim J, Katsahian S, Iannelli A

Background

Until 2010, adjustable gastric banding (AGB) represented the most common bariatric procedure in France. This trend recently reversed and rate of band removal progressively increased. The aim of this study was to analyze the graft survival based on a national database.

Methods

All patients undergoing AGB in France between 2007 and 2013 were included. Graft survival was calculated until band removal or at December 31st 2013 if band in place. Survival analysis was performed according to Kaplan-Meier method. Factors associated with band removal were evaluated by uni- and multivariate analysis. Data were extracted from the national administrative database “PMSI” (Programme de Médicalisation des Systèmes d’Information)

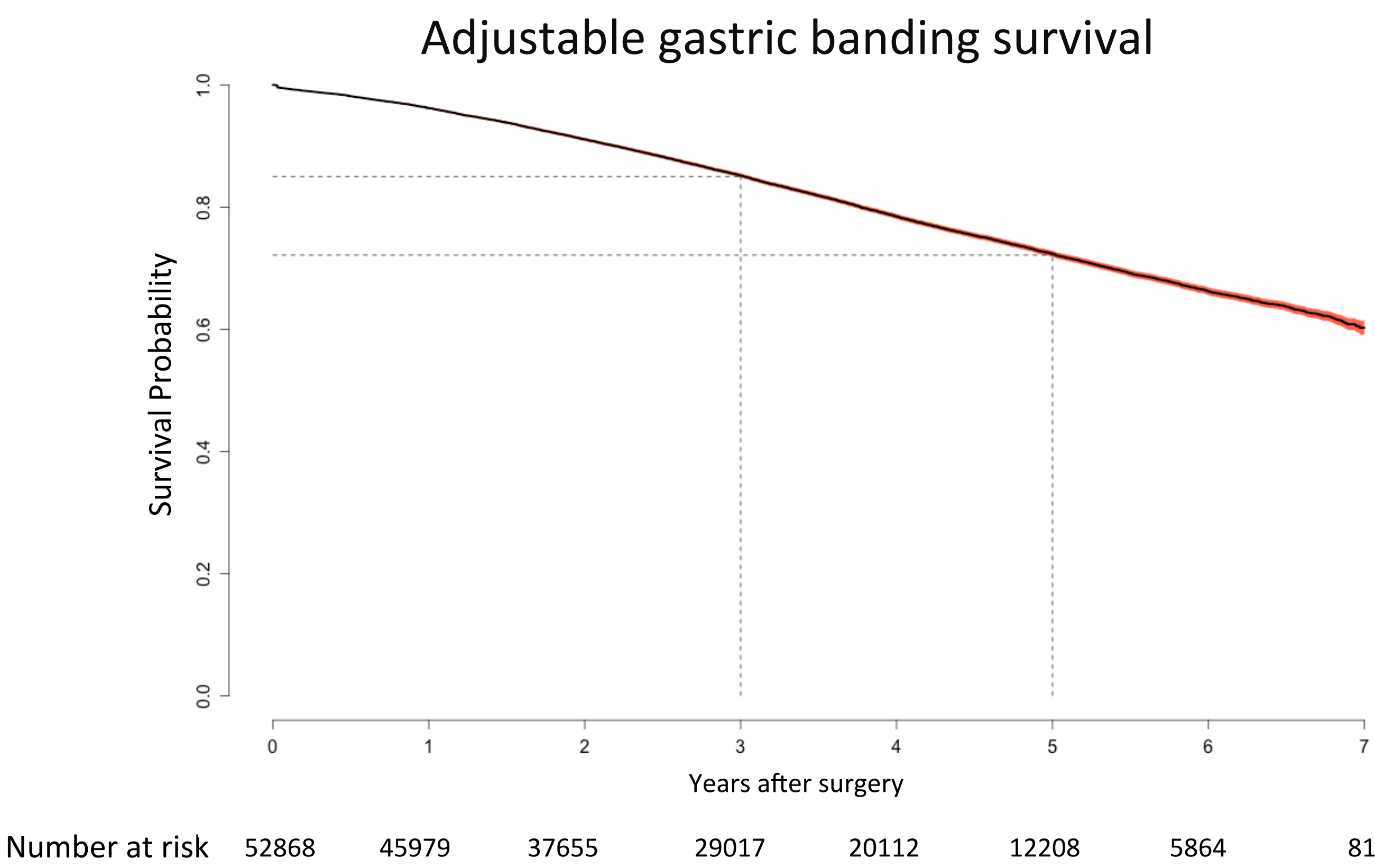
Results

During the study period 57917 patients underwent AGB. After selection, 52868 patients were included in the study. The number of procedures decreased from 10478 in 2007, to 8627 in 2010 and 5400 in 2013 (- 48% over 7 years). Mean age was 36.3 years, women prevalence was 85.7%, BMI was <40 kg/m² in 35.3% of patients, 40-50 kg/m² in 59.7% and >50 kg/m² in 5.0%. Mean follow-up was 41.8 (0-84.2) months. A total of 10815 AGB were removed (20.5%). Removal rates at 1, 3, and 5 years were 4%, 14% and 28% respectively. Female gender, age, BMI, type 2 diabetes, hypertension, dyslipidemia, obstructive sleep apnea, and surgical volume were found significantly associated with band removal on multivariate analysis.

Conclusions

AGB was removed in a quarter of patients at 5 years. With an average removal rate of 5.6% per year, AGB should not be considered as a durable and valuable option in the treatment of a chronic disease such as obesity.

Survival analysis (Kaplan Meier)



Multivariate analysis of factors associated with band removal

Variable		adjHR	95%CI	p-value
Sex	Male	reference		
	Female	1.60	1,51-1,71	<0,001
Age	18-30	reference		
	30-40	0,98	0,93-1,03	0,8
	40-50	0,90	0,85-0,95	<0,001
	50-60	0,77	0,71-0,82	<0,001
	>60	0,54	0,45-0,63	<0,001
BMI	<40	reference		
	40-50	1,17	1,13-1,23	<0,001
	>50	1,83	1,68-1,99	<0,001
T2D	No	reference		
	Yes	1,14	1,06-1,22	<0,001
HT	No	reference		
	Yes	1,16	1,10-1,23	<0,001
OSAS	No	reference		
	Yes	1,37	1,29-1,46	<0,001
Dyslipidemia	No	reference		
	Yes	1,27	1,19-1,35	<0,001
Hospital volume	<50	reference		
	>50	0,82	0,79-0,85	<0,001

BMI: body Mass index; T2D: type 2 diabetes, HT: arterial hypertension; OSAS: obstructive sleep apnoea, syndrome.

