

Proyecto Vikingo: Nuestros Resultados en los Primeros 5 años

Paola Lora Cumplido
Guillermo Carreño Villarreal
Carlos Álvarez Laso
Helena Padín Álvarez
Rubén Rodríguez García
Ylenia Díaz Solís
José Ignacio Rodríguez García

Hospital de Cabueñes. Gijón

Introducción

- El cáncer de recto:
 - Complejidad diagnóstico-terapéutica
 - Cooperación interdisciplinar
- Desconocimiento de las tasas nacionales de RL y supervivencia a los 5 años tras cirugía
- 2006 : “La escisión del mesorrecto, un proyecto docente y auditado” o “Proyecto Vikingo” de la AEC
 - Formación de EMD y auditar los resultados obtenidos

Introducción

- Cáncer de recto:

Abordaje laparoscópico (2002)

Radioquimioterapia neoadyuvante (2005)

Unidad Coloproctología-EMD (2008)

Proyecto “Vikingo” (2009)

TAMIS (“Full Thickness”)/Interesfinteriana (2012)

TaTAMIS (ETM) (2013)

Objetivos

- Analizar nuestros resultados en términos de supervivencia y calidad de la cirugía desde la incorporación en el proceso docente auditado
- Compararlos con estándares nacionales

Material y Métodos

- Estudio prospectivo
- Pacientes intervenidos de cáncer rectal desde Enero 2009 hasta Diciembre 2013
 - 234 pacientes (191 intención curativa)
- Variables estudiadas:
 - Tasa de cirugía conservadora de esfínteres
 - Morbi-mortalidad
 - Supervivencia global y libre de enfermedad

Resultados

	H. Cabueñes (N=191)	Nacional (N=9860)
Edad	69.0 (10.7)	68.6 (38.5%)
Sexo: Varón	129 (67.5%)	6528 (66.2%)
Nivel tumoral		
0-6 cm	70 (36.6%)	3772 (38.3%)
7-11 cm	72 (37.7%)	4149 (42.1%)
12-15 cm	49 (25.7%)	1939 (19.7%)
Estadío Tumoral		
0	12 (6.28%)	1013 (10.3%)
I	61 (31.9%)	2871 (29.1%)
II	56 (29.3%)	2943 (29.8%)
III	62 (32.5%)	3033 (30.8%)
Neoadyuvancia	93 (48.7%)	6011 (61.0%)

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Resultados

	H. Cabueñes (N=191)	Nacional (N=9860)
AAP	39 (20.4%)	2326 (23.6%)
Resección Anterior	138 (72.3%)	6738 (68.3%)
Hartmann	14 (7.33%)	796 (8.07%)
Laparoscopia	21.37%	33.31%
Conversión	4.27%	6.63%
Laparotomía	74.36%	60.06%
Estoma de derivación (Resección de recto)	19.32%	36.97%

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Resultados

	H. Cabueñes (N=191)	Nacional (N=9860)
Perforación	14 (7.33%)	457 (4.63%)
Invasión MRC	17 (8.90%)	833 (8.45%)
Calidad del mesorrecto:		
Satisfactoria	137 (72.1%)	7683 (79.9%)
Parcialmente	25 (13.2%)	1311 (13.6%)
Insatisfactoria	28 (14.7%)	620 (6.45%)
Remisión Completa (GR0)	4.41%	8.05%

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Resultados

	H. Cabueñes (N=191)	Nacional (N=9860)
Infección H.Q.	12.39%	20.49%
Infección Periné	7.26%	13.00%
Dehiscencia Anastomótica	8.55%	15.30%
Absceso IA	4.70%	11.17%
Reintervenciones	14.96%	20.49%
Mortalidad	5.98%	6.52%

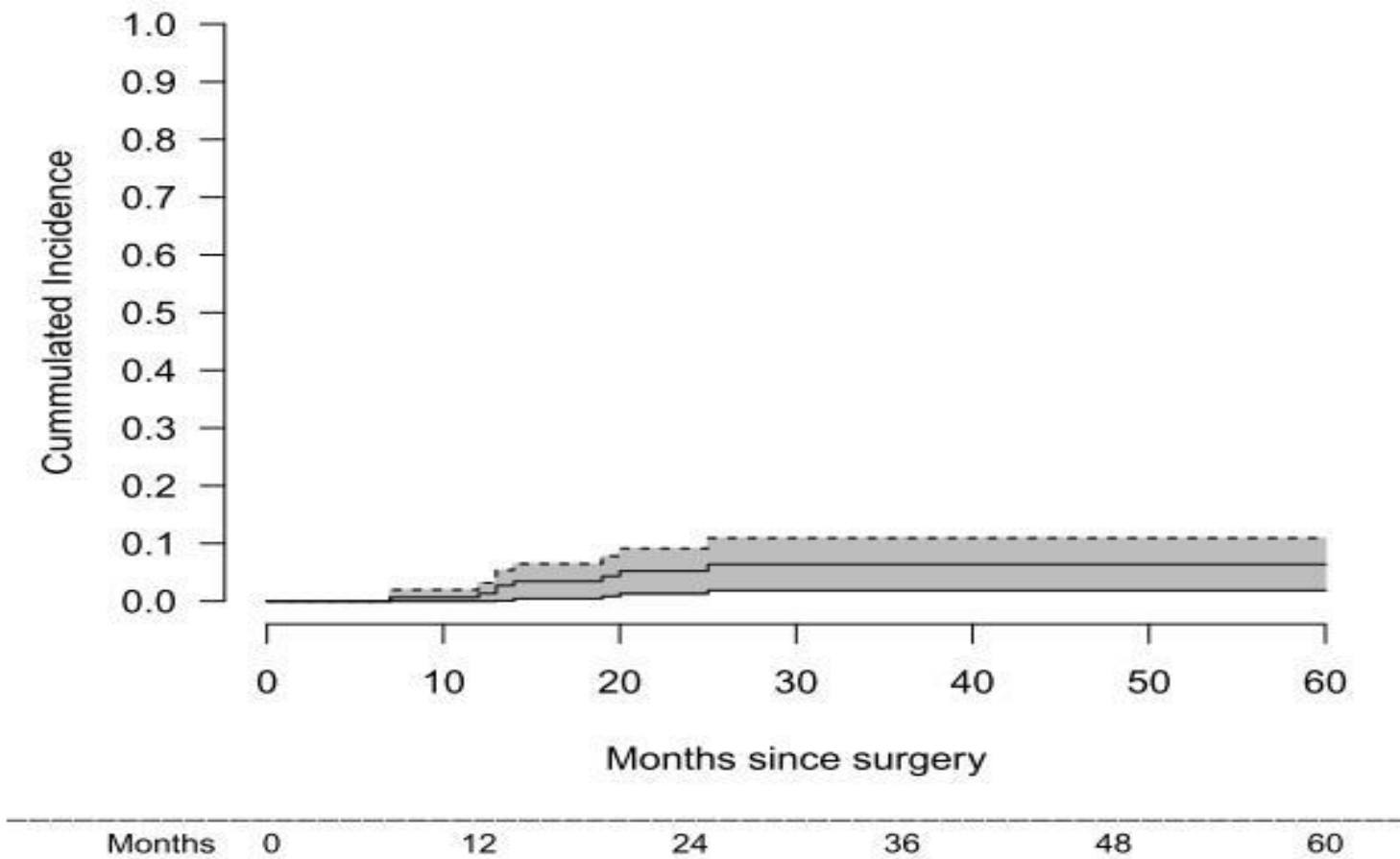
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Resultados

	H. Cabueñes (N=191)	Nacional (N=9860)
Recidiva (meses)	7 (3.66%) 20.0 [11.0;34.0]	352 (3.57%) 20.0 [8.00;38.0]
Metástasis (meses)	25 (13.1%) 18.0 [7.00;32.0]	1154 (11.7%) 19.0 [7.00;36.0]
Supervivencia (meses)	79.6% 21.0 [11.0;34.0]	85.4% 21.0 [8.00;38.0]

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Figure 1: Local Recurrence



N: 191 138 75 43 7 1

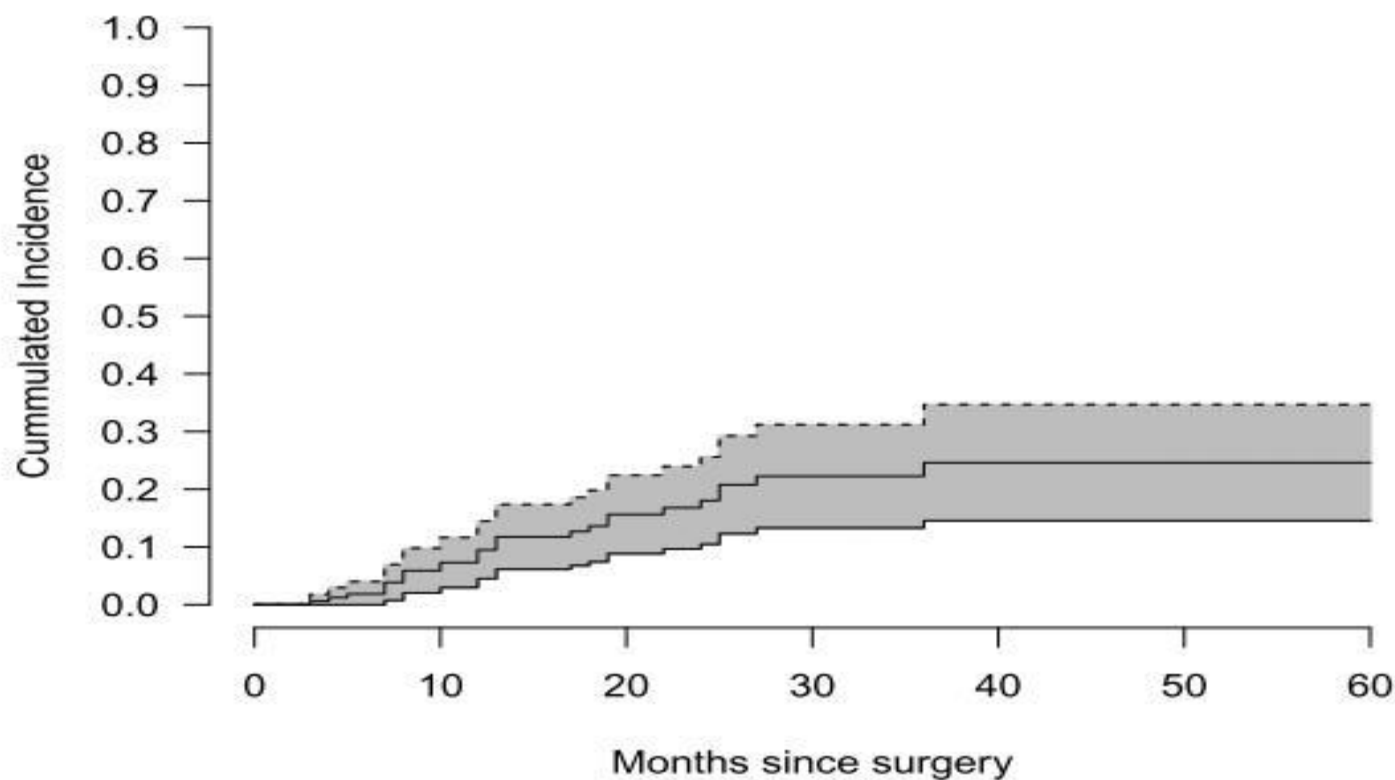
According to Local Recurrence

	No event n=184	Event n=7	Crude HR	p-value	Multivariate HR	p-value	N
Age (10y)	6.91 (1.05)	6.63 (1.63)	0.84 [0.43;1.65]	0.616	0.74 [0.30; 1.79]	0.5	191
Sex: Men	123 (66.8%)	6 (85.7%)	3.11 [0.37;25.9]	0.294	3.48 [0.25; 48.81]	0.355	191
Tumor level:							191
0-6cm	66(35.9%)	4 (57.1%)	3.29 [0.37;29.4]	0.288	16.47 [0.96; 282.90]	0.054	
7-11cm	70 (38.0%)	2 (28.6%)	1.79 [0.16;19.7]	0.635	7.60[0.48; 119.97]	0.15	
Tumor stage:							191
0	11 (5.98%)	1 (14.3%)	4.44 [0.28;71.0]	0.292	50.74 [1.03;2508.01]	0.048	
II	54 (29.3%)	2 (28.6%)	2.66 [0.24;29.3]	0.425	7.64[0.48; 122.44]	0.151	
III	59 (32.1%)	3 (42.9%)	3.70 [0.38;35.6]	0.258	3.11 [0.22; 43.61]	0.4	
Neoadjuvant	92 (50.0%)	1 (14.3%)	0.19 [0.02;1.60]	0.127	0.03 [0.00; 0.80]	0.036	191
Type of resection:							191
Abdominoperineal resection	37 (20.1%)	2 (28.6%)	1.25 [0.24;6.43]	0.792	0.26 [0.02; 2.81]	0.266	
Hartmann	14 (7.61%)	0 (0.00%)	0.00 [0.00;.]	0.999	0.00 [0.00; Inf]	0.999	
Perforation	13 (7.07%)	1 (14.3%)	1.74 [0.21;14.5]	0.609	0.71 [0.05; 9.58]	0.795	191
MRC	16 (8.70%)	1 (14.3%)	1.50 [0.18;12.4]	0.709	1.48 [0.09; 23.86]	0.781	191
Mesorecto quality:							190
Partial	24 (13.1%)	1 (14.3%)	1.07 [0.12;9.17]	0.950	1.08[0.09; 13.34]	0.951	
No-satisfactory	27 (14.8%)	1 (14.3%)	1.32 [0.15;11.4]	0.800	0.52 [0.03; 9.12]	0.656	

According to Local Recurrence

	No event n=9508	Event n=352	Crude HR	p-value	Multivariate HR	p-value	N
Age (10y)	6.86 (3.91)	6.79(1.24)	1.00 [0.98;1.03]	0.786	0.99 [0.93; 1.07]	0.882	9860
Sex: Men	6287(66.1%)	241(68.5%)	1.15 [0.92;1.44]	0.223	1.21 [0.97; 1.52]	0.095	9860
Tumor level:							9860
0-6cm	3603(37.9%)	169(48.0%)	1.86 [1.35;2.57]	<0.001	2.04 [1.39; 3.00]	<0.001	
7-11cm	4014(42.2%)	135(38.4%)	1.38 [0.99;19.2]	0.054	1.43[1.01; 2.02]	0.043	
Tumor stage:							
0	1002(10.5%)	11(3.12%)	0.60 [0.31;1.14]	0.117	0.63 [0.33;1.21]	0.166	9860
II	2829 (29.8%)	114(32.4%)	2.15 [1.56;2.98]	<0.001	1.69[1.21; 2.35]	0.002	
III	2860 (30.1%)	173(49.1%)	3.33 [2.45;4.51]	<0.001	2.41 [1.75; 3.32]	<0.001	
Neoadjuvant	5808(61.1%)	203(57.7%)	0.86 [0.70;1.07]	0.176	0.92 [0.73; 1.16]	0.482	9860
Type of resection:							9860
Abdominoperineal resection	2221(23.4%)	105(29.8%)	1.81 [1.42;2.30]	<0.001	0.96 [0.69; 1.32]	0.791	
Hartmann	728(7.66%)	68(19.3%)	4.02 [3.04;5.31]	0.000	2.63 [1.95; 3.55]	<0.001	
Perforation	394(4.14%)	63(17.9%)	5.07 [3.86;6.65]	0.000	2.38 [1.74; 3.25]	<0.001	9860
MRC	732(7.70%)	101(28.7%)	4.85 [3.85;6.11]	0.000	2.76[2.12; 3.59]	<0.001	9858
Mesorecto quality:							9614
Partial	1252(13.5%)	59(17.1%)	1.49 [1.12;1.98]	0.007	1.19[0.89; 1.59]	0.237	
No-satisfactory	564(6.09%)	56(16.2%)	3.17 [2.37;4.25]	<0.001	1.55 [1.11; 2.15]	0.009	

Figure 2: Metastasis



Months 0 12 24 36 48 60

N: 191 126 64 35 6 1

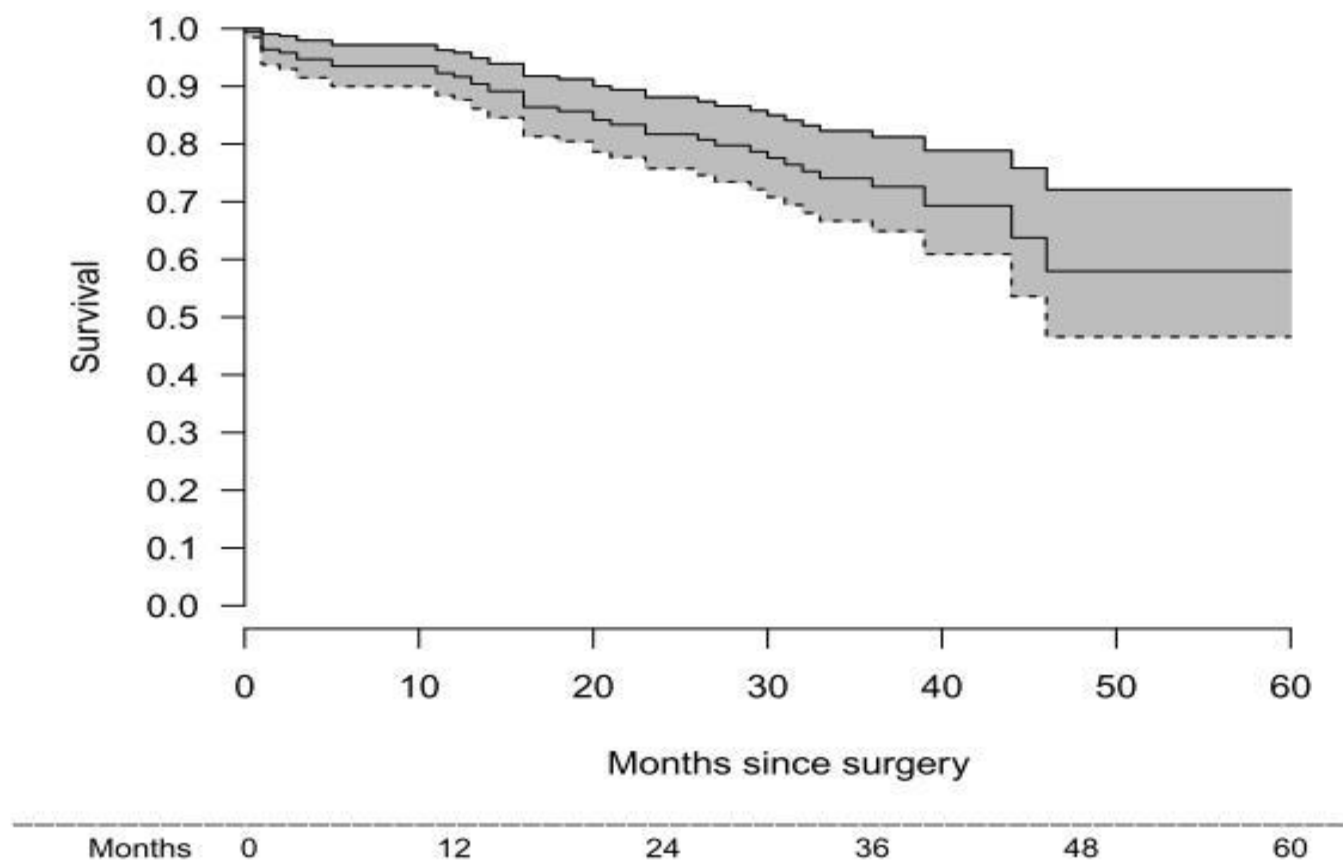
According to Metastasis

	No event n=166	Event n=25	Crude		Multivariate		N
			HR	p-value	HR	p-value	
Age (10y)	6.97 (1.03)	6.45(1.25)	0.72 [0.51;1.01]	0.055	0.75 [0.50; 1.13]	0.169	191
Sex: Men	111 (66.9%)	18 (72.0%)	1.36 [0.57;3.27]	0.488	0.90 [0.34; 2.43]	0.841	191
Tumor level:							191
0-6cm	60 (36.1%)	10 (40.0%)	0.89 [0.36;2.20]	0.804	1.10 [0.23; 5.19]	0.902	
7-11cm	66 (39.8%)	6 (24.0%)	0.53 [0.19;1.50]	0.235	0.45 [0.14; 1.51]	0.198	
Tumor stage:							
0	11 (6.63%)	1 (4.00%)	1.45 [0.15;13.9]	0.749	0.87 [0.08;9.36]	0.912	191
II	49 (29.5%)	7 (28.0%)	3.35 [0.87;13.0]	0.080	3.27 [0.77; 13.84]	0.107	
III	48 (28.9%)	14 (56.0%)	6.85 [1.96;23.9]	0.003	5.55 [1.37; 22.46]	0.016	
Neoadjuvant	79 (47.6%)	14(56.0%)	1.58 [0.72;3.49]	0.254	2.66 [0.96; 7.37]	0.06	191
Type of resection:							191
Abdominoperineal resection	32 (19.3%)	7 (28.0%)	1.41 [0.58;3.40]	0.444	0.87 [0.20; 3.70]	0.85	
Hartmann	13 (7.83%)	1 (0.00%)	1.55 [0.20;11.7]	0.672	5.07 [0.48; 53.12]	0.175	
Perforation	11 (6.63%)	3 (4.00%)	1.53 [0.46;5.11]	0.492	0.56 [0.15; 2.19]	0.408	191
MRC	9 (5.42%)	8 (32.0%)	6.31 [2.71;14.7]	<0.001	3.57 [1.22; 10.48]	0.02	191
Mesorecto quality:							190
Partial	20 (12.1%)	5 (20.0%)	1.78 [0.66;4.82]	0.258	1.81 [0.62; 5.27]	0.276	
No-satisfactory	25 (15.2%)	3 (12.0%)	1.29 [0.38;4.41]	0.688	1.04 [0.26; 4.22]	0.953	

According to Metastasis

	No event n=8706	Event n=1154	Crude HR	p-value	Multivariate HR	p-value	N
Age (10y)	6.87 (4.07)	6.74(1.17)	1.00 [0.98;1.02]	0.958	1.00 [0.98; 1.02]	0.846	9860
Sex: Men	5769 (66.3%)	759 (65.8%)	1.02 [0.90;1.15]	0.801	1.05 [0.93;1.19]	0.424	9860
Tumor level:							9860
0-6cm	3277 (37.6%)	495 (42.9%)	1.28 [1.09;1.50]	0.003	1.18 [0.96; 1.46]	0.108	
7-11cm	3695 (42.4%)	454 (39.3%)	1.08 [0.92;1.28]	0.340	1.08 [0.90; 1.29]	0.403	
Tumor stage:							
0	978 (11.2%)	35 (3.03%)	0.66 [0.46;0.95]	0.026	0.57 [0.39;0.83]	0.004	9860
II	2624 (30.1%)	319 (27.6%)	2.16 [1.78;2.62]	<0.001	1.91 [1.57; 2.33]	<0.001	
III	2387 (27.4%)	646 (56.0%)	4.67 [3.91;5.56]	0.000	4.12 [3.44; 4.94]	<0.001	
Neoadjuvant	5274 (60.6%)	737(63.9%)	1.13 [1.00;1.28]	0.043	1.32 [1.16; 1.51]	<0.001	9860
Type of resection:							9860
Abdominoperineal resection	2001 (23.0%)	325 (28.2%)	1.44 [1.26;1.64]	<0.001	1.20 [1.01;1.44]	0.042	
Hartmann	669 (7.68%)	127 (11.0%)	1.90 [1.57;2.30]	<0.001	1.60 [1.31; 1.95]	<0.001	
Perforation	366 (4.20%)	91 (7.89%)	2.01 [1.62;2.49]	<0.001	1.22 [0.96; 1.54]	0.097	9860
MRC	610 (7.01%)	223 (19.3%)	2.98 [2.58;3.45]	0.000	1.83 [1.56; 2.14]	<0.001	9858
Mesorrecto quality:							9614
Partial	1125 (13.3%)	186 (16.5%)	1.30 [1.11;1.52]	0.001	1.13 [0.96; 1.33]	0.134	
No-satisfactory	520 (6.13%)	100(8.88%)	1.58 [1.28;1.94]	<0.001	1.10 [0.88; 1.38]	0.396	

Figure 3: Exitus



N: 191 139 76 43 7 1

According to Exitus

	No event n=152	Event n=39	Crude		Multivariate		
			HR	p-value	HR	p-value	N
Age (10y)	6.87 (1.03)	7.01(1.22)	1.29 [0.94;1.17]	0.055	0.75 [0.50; 1.13]	0.169	191
Sex: Men	101 (66.4%)	28(71.8%)	1.50 [0.74;3.04]	0.488	0.90 [0.34; 2.43]	0.841	191
Tumor level:							191
0-6cm	56 (36.8%)	14 (35.9%)	1.06 [0.48;2.34]	0.804	1.10 [0.23; 5.19]	0.902	
7-11cm	58 (38.2%)	14 (35.9%)	1.17 [0.53;2.59]	0.235	0.45 [0.14; 1.51]	0.198	
Tumor stage:							
0	9 (5.92%)	3 (7.69%)	2.20 [0.57;8.55]	0.749	0.87 [0.08;9.36]	0.912	191
II	47 (30.9%)	9 (23.1%)	1.80 [0.67;4.83]	0.080	3.27 [0.77; 13.84]	0.107	
III	42 (27.6%)	20 (51.3%)	3.59 [1.52;8.50]	0.003	5.55 [1.37; 22.46]	0.016	
Neoadjuvant	74 (48.7%)	19(48.7%)	1.23 [0.65;2.31]	0.254	2.66 [0.96; 7.37]	0.06	191
Type of resection:							191
Abdominoperineal resection	33 (21.7%)	6 (15.4%)	0.73 [0.30;1.77]	0.444	0.87 [0.20; 3.70]	0.85	
Hartmann	8 (5.26%)	6 (15.4%)	6.31 [2.50;15.9]	0.672	5.07 [0.48; 53.12]	0.175	
Perforation	9 (5.92%)	5 (12.8%)	1.54 [0.60;3.93]	0.492	0.56 [0.15; 2.19]	0.408	191
MRC	10 (6.58%)	7 (17.9%)	2.18 [0.96;4.99]	<0.001	3.57 [1.22; 10.48]	0.02	191
Mesorecto quality:							190
Partial	18 (11.8%)	7 (18.4%)	1.14 [0.49;2.63]	0.258	1.81 [0.62; 5.27]	0.276	
No-satisfactory	25 (16.4%)	3 (7.89%)	0.84 [0.25;2.79]	0.688	1.04 [0.26; 4.22]	0.953	

According to Exitus

	No event n=8416	Event n=1444	Crude HR	p-value	HR	Multivariate p-value	N
Age (10y)	6.78 (4.14)	7.31 (1.09)	1.01 [1.01;1.02]	<0.001	1.02 [1.01; 1.02]	<0.001	9860
Sex: Men	5514 (65.5%)	1014 (70.2%)	1.24 [1.11;1.39]	<0.001	1.30 [1.16; 1.46]	<0.001	9860
Tumor level:							9860
0-6cm	3156 (37.5%)	616 (42.7%)	1.34 [1.15;1.55]	<0.001	1.48 [1.23; 1.78]	<0.001	
7-11cm	3564 (42.3%)	585 (40.5%)	1.19 [1.02;1.38]	0.0025	1.34 [1.15; 1.57]	<0.001	
Tumor stage:							
0	966 (11.5%)	47 (3.25%)	0.47 [0.34;0.64]	<0.001	0.54 [0.39;0.74]	<0.001	9860
II	2521 (30.0%)	422 (29.2%)	1.45 [1.25;1.68]	<0.001	1.30 [1.12; 1.52]	<0.001	
III	2534 (28.0%)	679 (47.0%)	2.36 [2.06;2.71]	0.000	2.08 [1.80; 2.39]	<0.001	
Neoadjuvant	5274 (62.7%)	737 (51.0%)	0.66 [0.60;0.74]	<0.001	0.71 [0.64; 0.80]	<0.001	9860
Type of resection:							9860
Abdominoperineal resection	1928 (22.9%)	398 (27.6%)	1.52 [1.35;1.71]	<0.001	1.28 [1.09; 1.51]	0.003	
Hartmann	556 (6.61%)	240 (16.6%)	3.06 [2.65;3.54]	0.000	2.42 [2.08; 2.82]	<0.001	
Perforation	323 (3.84%)	134 (9.28%)	2.25 [1.88;2.68]	0.000	1.34 [1.10; 1.63]	0.003	9860
MRC	571 (6.78%)	262 (18.2%)	2.59 [2.27;2.96]	0.000	1.71 [1.47; 1.98]	<0.001	9858
Mesorecto quality:							9614
Partial	1059 (12.9%)	252 (17.9%)	1.43 [1.25;1.65]	<0.001	1.24 [1.08; 1.43]	0.003	
No-satisfactory	489 (5.96%)	131 (9.32%)	1.64 [1.37;1.97]	<0.001	1.10 [0.90; 1.34]	0.343	

Conclusiones

- Hay diferencias en la localización, sin diferencias en la presentación por estadios y se recurre menos a la neoadyuvancia
- Porcentaje de abordaje minimamente invasivo, conversión y utilización de estoma por debajo de los estándares nacionales
- Márgenes de mejora en la calidad del mesorrecto.
- Remisión completa tras neoadyuvancia muy inferior
- Menor morbilidad postoperatoria
- Sin diferencias en las recurrencias locales ni en metástasis o supervivencia