Outcomes after resection for colorectal cancer

The Colorectal Cancer Collaborative

Introduction

Colorectal cancer is the third most common cancer worldwide. In this study, we have re-analysed a classic dataset to determine the influence of tumour differentiation on 5-year survival prior to the introduction of modern chemotherapeutic regimes.

Methods

Data were generated within a randomised trial of adjuvant chemotherapy for colon cancer. Levamisole is a low-toxicity compound etc. etc.

Results

Patient characteristics

Table 1 shows the characteristics of patients in the study.

Table 1: Demographics of patients entered into randomised controlled trial of adjuvant chemotherapy after surgery for colon cancer.

Exposure: Differentiation		Moderate	Poor	Well	p
Age (years)	Mean (SD)	59.9 (11.7)	59.0 (12.8)	60.2 (12.8)	0.788
Sex	Female	314 (71.7)	73 (16.7)	51 (11.6)	0.400
	Male	349 (74.6)	77 (16.5)	42 (9.0)	
Extent of spread	Submucosa	12 (60.0)	3 (15.0)	5 (25.0)	0.081
	Muscle	78 (76.5)	12 (11.8)	12 (11.8)	
	Serosa	542 (72.8)	127 (17.0)	76 (10.2)	
	Adjacent structures	31 (79.5)	8 (20.5)	0(0.0)	
Lymph nodes involved	Mean (SD)	3.6(3.4)	4.7(4.4)	2.7(2.2)	< 0.001

5-year outcome by tumour differentiation

Table 2 shows a univariable and multivariable regression analysis of 5-year mortality by patient and disease characteristics.

Table 2: 5-year survival after colon cancer (logistic regression)

Mortality 5 year		Alive	Died	OR (univariable)	OR (multivariable)
Differentiation	Well	52 (10.5)	40 (10.1)	-	-
	Moderate	382 (76.9)	269 (68.1)	0.92 (0.59-1.43, p=0.694)	0.70 (0.44-1.12, p=0.132)
	Poor	63 (12.7)	86 (21.8)	1.77 (1.05-3.01, p=0.032)	1.08 (0.61-1.90, p=0.796)
Age (years)	Mean (SD)	59.8 (11.4)	59.9 (12.5)	1.00 (0.99-1.01, p=0.986)	1.01 (1.00-1.02, p=0.195)
Sex	Female	243 (47.6)	194 (48.0)	-	-
	Male	268 (52.4)	210 (52.0)	0.98 (0.76-1.27, p=0.889)	0.98 (0.74-1.30, p=0.885)
Extent of spread	Submucosa	16(3.1)	4(1.0)	-	-
	Muscle	78 (15.3)	25(6.2)	1.28 (0.42-4.79, p=0.681)	1.28 (0.37-5.92, p=0.722)
	Serosa	401 (78.5)	349 (86.4)	3.48 (1.26-12.24, p=0.027)	3.13 (1.01-13.76, p=0.076)
	Adjacent structures	16(3.1)	26(6.4)	6.50 (1.98-25.93, p=0.004)	6.04 (1.58-30.41, p=0.015)
Lymph nodes involved	Mean (SD)	2.7(2.4)	4.9 (4.4)	1.24 (1.18-1.30, p<0.001)	1.23 (1.17-1.30, p<0.001)

Discussion

In this study etc.