The influence of age on HCC has been reported in two studies [3, 4]. The authors suggested a possible influence of the fibrolamellar variant (more frequent in young subjects) as partially responsible for the data. In our experience, no fibrolamellar carcinoma was detected, suggesting that other factors related to young age are responsible for a better survival.

In conclusion, the present study, although it failed to show a correlation between Ki-67 expression and prognosis, is helpful for better definition of the prognostic variables influencing results in clinical trials. Proper selection of patients for the various treatment modalities should avoid inclusion of poor-risk patients in clinical trials, but should facilitate comparison of therapeutic options and may improve clinical results.

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0959-8049(95)00234-0

Patterns of Gastric Cancer Care by Age. A Registry-based Study in Romagna, Italy

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THE ROLE of cancer registries in informing the medical community about major aspects of cancer in the elderly has recently been emphasised [1]. In Europe, despite a steady incidence decrease observed over the last decades, gastric cancer (GC) (ICD-9 151) still comprises 8–9% of all new cases of cancer [2]. In particular, GC has a major impact on geriatric oncology. In Europe, such an important health problem has never been the subject of population-based studies of patterns of care. We have reviewed the medical records of GC cases notified to the Romagna Cancer Registry [3, 4] for residents of Ravenna (northern Italy) during 1987–1989. This is one of the areas at highest risk in Europe [3].

The 317 eligible patients were treated in 11 public hospitals and three private clinics. There were 185 males (median age 72 years, range 34–93) and 132 females (median age 77 years, range 35–95). The original case records were obtained for 293 (92%) patients. To minimise the probability of misclassification, data collection was focused on a few variables each having essential modalities. Cases were staged according to the 1992 TNM criteria of the UICC [5]. T categories were based on postresection (pT) information. N classification was based on pathological and surgical data. For the M classification, any available information was used to classify a case as M_1 with the M_0 class being based on surgical data. Age was categorised as shown in Table 1. The extended Mantel–Haenszel χ^2 test for trend [6] was used to assess the relationship between age and (a) the proportion of patients given an essential set of diagnostic and therapeutic procedures, and (b) the TNM distribution of cases.

We observed an inverse relationship between age and the proportion of patients undergoing endoscopy [coding age groups as in Table 1: A 50/53 (94%), B 67/72 (93%), C 91/101 (90%), D 48/67 (72%), $\chi^2 = 14.2$, $P = 0.0002$] and ultrasound [A 47/53 (89%), B 62/72 (86%), C 86/101 (85%), D 46/67 (69%), $\chi^2 = 7.7$, $P = 0.0054$] with no significant age trend in the proportion of patients examined by barium X-ray and by computed tomography.

The proportion of patients surgically cured decreased with age, paralleled by an increase in the frequency of cases not undergoing any surgical procedure (Table 1). The downward trend in the frequency of palliative/explorative approaches was of borderline significance. Restricting analysis to the two categories of patients not cured, the progressive shift from palliative/explorative surgery to "no surgery" was highly significant ($\chi^2 = 27.0$, $P = 0.0000$). Age was also a determinant of the probability of receiving palliative chemotherapy [A 4/16 (25%), B 4/24 (17%), C 2/44 (5%), D 0/49, $\chi^2 = 13.8$, $P = 0.0002$) and adjuvant chemotherapy [A 9/37 (24%), B 5/48 (10%), C 0/56, D 0/17, $\chi^2 = 16.1$, $P = 0.0001$].

TNM distribution by age was closely related to age trend in patterns of clinical and surgical assessment (Table 1). Because of the increasing frequency of T_X, N_X and M_X cases with increasing age, the significant reductions in the T_{1-2}, N_0 and M_0 categories were not coupled with reverse trend in the proportions of more advanced lesions, i.e. T_{3-4}, N_{1-2} and M_1. For the N_{1-2} cases the opposite was observed, with a significant age-dependent reduction.

Admittedly, our findings regarding diagnosis modalities might be biased by missing information on tests performed (if any) on an outpatient basis and not reported in hospital records. In fact,

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Table 1. Patterns of surgery and TNM distribution by age (total no. of patients 291)

Age group (years)	Surgery			T			N			M		
	CS	PS+ES	NS	1–2	3–4*	X	0	1–2	X	0	1	X
A. <60	37	13	3	38	10	5	18	27	8	38	14	1
	(70)	(25)	(06)	(72)	(19)	(09)	(34)	(51)	(15)	(72)	(26)	(02)
B. 60–69	48	12	12	43	16	13	23	32	17	45	24	3
	(67)	(17)	(17)	(60)	(22)	(18)	(32)	(44)	(24)	(63)	(33)	(04)
C. 70–79†	56	18	26	47	23	30	27	38	35	54	33	13
	(56)	(18)	(26)	(47)	(23)	(30)	(27)	(38)	(35)	(54)	(33)	(13)
D. >79†	17	6	43	17	4	45	10	9	47	18	17	31
	(26)	(09)	(65)	(26)	(06)	(68)	(15)	(14)	(71)	(27)	(26)	(47)
χ^2 for trend	25.6	4.0	52.0	27.7	2.9	49.9	6.0	18.4	42.5	24.5	0.0	46.6
P value	0.0000	0.0454	0.0000	0.0000	0.09	0.0000	0.0146	0.0000	0.0000	0.0000	0.89	0.0000

CS, curative surgery; PS, palliative surgery; ES, explorative surgery; NS, no surgery. Values in parentheses are row percentages (total = 100% for each age group in each column). * The T_3 and T_4 categories include those lesions showing, either on surgical exploration or at laparoscopy, penetration through the serosa and, respectively, involvement of adjacent structures. †Data unavailable for 1 patient.

the amount of clinical data formally evaluable by hospital staff for decisions on treatment decreased with increasing age.

Age-specific proportions of patients undergoing curative surgery in the present series were similar to those observed among GC cases of the SEER cancer registries [7]. A downward trend was evident in both studies. In view of the reduced tolerance to functional changes following major surgery [8], it has been emphasised that a key issue in geriatric surgical oncology is the increased importance of palliation compared to cure [1, 8]. In our series, the most pronounced effect of age was an increase in the frequency of patients not undergoing any type of surgery, with a reduction in the frequency of palliative/explorative approaches, even among patients not having curative surgery. Thus, the relative importance of surgical palliation decreased with increasing age.

GC has never been taken into consideration in studies aimed at evaluating age differences in stage distribution of patients with common types of tumours [9, 10]. Our data are apparently inconclusive because TNM classification of GC patients mirrors the key role of the surgical approach in the staging process. In fact, patient's age appeared to exert an atypical, two-fold effect on stage of GC as compared with other major malignancies, with an age-dependent decrease in the frequency of "early" stage categories being associated with a reverse trend for cases TNM-unclassified.

Our data suggest that age can be a strong determinant of major patterns of GC care.

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0959-8049(95)00237-5

Different Doses of Epirubicin Associated with Fixed Doses of Cyclophosphamide and 5-Fluorouracil: a Randomised Study in Advanced Breast Cancer

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INCREASING ANTHRACYCLINE dosage could ameliorate the antitumour effect in advanced breast cancer (BC). In fact, anthracy-

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