Association between height and mortality from cancer in Whitehall study

Height (inches)*	No of men	No of deaths	Rate†	Rate ratio (95% CI)		
				Adjusted for age	Adjusted for age and employment grade	Adjusted for age, employment grade, and smoking
Cancers related to smoking‡						
–66	2268	218	4.38	1.0	1.0	1.0
–69	6619	600	4.34	0.96 (0.82 to 1.13)	1.05 (0.90 to 1.23)	1.05 (0.89 to 1.22)
–72	6375	523	4.14	0.92 (0.79 to 1.08)	1.04 (0.89 to 1.23)	1.05 (0.89 to 1.23)
>72	2116	160	4.01	0.88 (0.72 to 1.08)	1.02 (0.83 to 1.25)	1.06 (0.86 to 1.30)
Height increment (6 inches)				0.93 (0.83 to 1.04)	1.02 (0.91 to 1.15)	1.04 (0.93 to 1.17)
P value for trend				0.20	0.70	0.50
Cancers unrelated to smoking¶						
–66	2268	85	1.74	1.0	1.0	1.0
–69	6619	258	1.85	1.02 (0.80 to 1.30)	1.04 (0.81 to 1.33)	1.04 (0.81 to 1.33)
–72	6375	283	2.19	1.20 (0.94 to 1.54)	1.24 (0.97 to 1.59)	1.25 (0.97 to 1.59)
>72	2116	99	2.44	1.29 (0.96 to 1.72)	1.34 (1.00 to 1.80)	1.36 (1.01 to 1.82)
Height increment (6 inches)				1.28 (1.08 to 1.51)	1.32 (1.11 to 1.56)	1.33 (1.12 to 1.57)
P value for trend				0.0042	0.0016	0.0011

*1 inch is about 2.5 cm.
†Age standardised rates per 1000 person years.
‡Lip (international classification of diseases, ninth revision (ICD-9) code 140); tongue (141); mouth and pharynx (143-9); oesophagus (150); pancreas (157); respiratory tract (160-163); and urinary tract (188-189).
¶ICD-9 codes 140-208, excluding cancers related to smoking above.

study, in which the positive association between childhood energy intake and subsequent risk of cancer was also confined to cancers unrelated to smoking.[2] Most previous studies have either grouped all cancers together or looked only at individual cancers. However, consistent with our results, the physicians health study found a positive association of height with all malignant neoplasms but not with lung cancer.[5] In line with extensive animal experimental evidence,[1] therefore, our data and those from the Boyd Orr study[2] suggest that energy intake during growth may be an important determinant of later risk of developing cancer. Since height serves as only an indirect and comparatively weak proxy measure of dietary intake in childhood, the size of the association found in this study may reflect a much stronger underlying association with directly measured childhood energy intake.

Contributors: The idea for this paper came from a discussion between the authors. GDS wrote the first draft of the manuscript around analyses performed by MS, and all authors contributed to the final draft. GDS is guarantor for the study.
Funding: None.
Conflict of interest: None.

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(Accepted 16 June 1998)

Initiating angiotensin converting enzyme inhibitors in mild to moderate heart failure in general practice: randomised, placebo controlled trial

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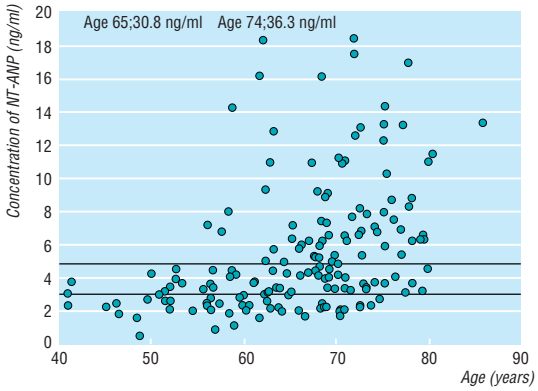
BMJ 1998;317:1352–3

Less than 50% of patients with heart failure in community practice receive an angiotensin converting enzyme inhibitor and then only usually at the instigation of or when prescribed by a hospital doctor.[1–3] Fear of side effects seems to be a barrier to starting treatment with angiotensin converting enzyme inhibitors,[3 4] reflecting the lack of substantial studies to show the safety of giving them in primary care.

Methods and results

General practitioners in 47 practices in the United Kingdom recruited patients with mild to moderate heart failure who had been receiving chronic diuretic treatment. Exclusion criteria were age >80 years, frusemide dose >100 mg/day, systolic arterial pressure <100 mm Hg, serum creatinine concentration >250 µmol/l, and sodium concentration <135 mmol/l.



N-terminal atrial natriuretic peptide (NT-ANP) versus age in study population. Lower line (2.8 ng/ml) indicates optimal value for distinguishing between patients with and without major left ventricular systolic dysfunction (ejection fraction ≤30%) in a population survey[6]; upper line (4.8 ng/ml) is median in study. Assays in this study and from the population survey were performed in the same laboratory

Plasma concentrations of N-terminal atrial natriuretic peptide were measured from blood samples taken before randomisation at a core laboratory.[5] Plasma concentrations >2.8 ng/ml indicated important cardiac dysfunction.[6]

Patients were randomised, double blind, to receive quinapril 5 mg or placebo. Blood pressure was monitored for 3 hours. Quinapril or matching placebo was subsequently titrated over 3 days to 20 mg/day. After 1 week patients were reassessed and then, without breaking blinded-treatment, all received 5 mg of quinapril. Patients were again monitored, titrated to 20 mg of open label quinapril, and reviewed after a further week.

The original intention was to recruit 1000 patients giving a 95% probability of observing any adverse event with a frequency >0.34%. The power of the study was reduced because only 178 patients were randomised, 96 of whom received placebo initially. The study was terminated because of slow recruitment. Plasma concentrations of NT-ANP are shown in the figure.

No serious adverse events occurred within 24 hours of starting quinapril. Blood pressure fell to a nadir of 133/78 mm Hg in patients receiving quinapril and 138/82 mm Hg in those receiving placebo at 2 hours post dose. Eleven patients (13.4%) randomised to receive quinapril and 5 (5.2%) receiving placebo had an asymptomatic fall in systolic blood pressure >20 mm Hg or to <90 mm Hg (all predefined). After one week serum creatinine concentration did not differ from baseline (112 µmol/l (interquartile range 98-122 µmol/l) with quinapril and 110 µmol/l (92-120 µmol/l) with placebo).

Comment

This is the first placebo controlled clinical trial reporting the safety of starting angiotensin converting enzyme inhibitors in primary care for selected patients with heart failure. Although the study was stopped prematurely because of slow recruitment (which may reflect continuing safety concerns), a frequency of serious adverse events of >2% (one in 50 initiations) was excluded. Furthermore, monitoring blood pressure after the first dose of quinapril seems unnecessary in appropriately selected patients.

The certainty of the diagnosis of heart failure in this study is of concern but the aim was to reflect the usual clinical setting. Access to echocardiography is limited and only the minority of patients undergo echocardiography.[2] Although diuretics that lower plasma concentrations of atrial natriuretic peptide were used,[6] 76% of patients had concentrations of N-terminal atrial natriuretic peptide that seem diagnostic of important ventricular dysfunction in epidemiological studies.[7] This implies that general practitioners identified patients with cardiac dysfunction reasonably accurately in this study, although precise identification of the cause of dysfunction still requires echocardiography.

Funding: All drugs for the study were supplied by Warner-Lambert Pharmaceuticals.

Conflict of interest: None.

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(Accepted 28 April 1998)

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Correction

Reporting on quality of life in randomised controlled trials: bibliographic study

An editorial error occurred in this article by Caroline Sanders and colleagues (31 October, pp 1191-4). Table 3 (referred to at the end of the Results section, p 1193) was omitted. The table is as follows:

Table 3 Indicators of quality of reporting on quality of life in 67 randomised controlled trials. Values are numbers (%) of trials unless stated otherwise

Indicator	Principal end point of trial		Difference (P value)*
	Quality of life (n=23)	Other (n=44)	
Methods			
Used established instrument	20 (87)	28 (64)	0.044
Patient provided quality of life information	21 (91)	25 (57)	0.004
Response rate given	19 (83)	19 (43)	0.002
Results			
Complete reporting of items and scores	16 (70)	15 (34)	0.006
Absolute differences given	23 (100)	33 (75)	0.009
Confidence intervals given	5 (22)	6 (14)	0.40
P values given	21 (91)	31 (70)	0.052
Median (range) sample size	198 (36-4736)	92 (11-1914)	0.034
Mean (SD) Jadad score as percentage of maximum	47.8 (23.2)	56.8 (23.6)	0.15

*Calculated by χ^2 tests, except for comparisons of sample sizes and Jadad scores calculated by Wilcoxon rank sum test.