This plus the immediacy of the reaction suggest that his death was unlikely to have been due to toxicity.

Nebulised lignocaine may cause narrowing of the airways in patients with asthma,² but this is rarely of clinical importance especially as nebulised bronchodilators are given before fiberoptic bronchoscopy. Hypersensitivity to lignocaine is uncommon. Urticarial reactions may occur,³ and deaths due to anaphylaxis after small doses of injected local anaesthetic have been reported.^{4,5} We believe that this is the first reported death due to topical lignocaine during fiberoptic bronchoscopy. This procedure, however, remains safe with few complications.

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Minimising bruising in the antecubital fossa after venepuncture

Because of the large number of bruises seen after venepuncture of the antecubital fossa in patients presenting for anaesthesia we investigated the phenomenon.

Methods and results

We recruited 20 volunteers (eight men and 12 women) aged 20-47 with blood pressures of less than 150/95 mm Hg. Each had 5 ml of blood taken from both antecubital fossas by means of a green, 21 gauge Monoject needle and a tourniquet inflated to exactly half the diastolic blood pressure to promote venous congestion. After deflation of the tourniquet haemostasis was promoted by one of two methods based on our observations of current ward practice. In the first method the subjects pressed the contralateral thumb on to a cotton wool ball over the site of venepuncture, keeping the elbow extended. In the second method the subject flexed the elbow, keeping the cotton wool ball over the puncture site. Both methods were used for two minutes, and the site was then inspected for 15 seconds. If bleeding had not stopped the method was repeated for one minute with the same inspection procedure; this was repeated until there was no visible bleeding. An adhesive dressing was then applied.

Subjects were randomised for which arm was to be flexed or extended and thus served as their own controls. All venepunctures were performed by the same investigator. A criterion of the study was that subjects with "difficult veins" and more than one clean puncture of the vein were excluded, as were those who had recently taken aspirin; in practice there were no exclusions. After 48 hours a second investigator, who was unaware of which method of haemostasis had been used, examined the venepuncture sites. Any visible bruising was noted and the area measured with tracing paper and a planimeter; the subject was asked about any symptoms associated with the bruising.

Flexing of the elbow after venepuncture produced visible bruising in 15 subjects compared with only six when the arm was held straight ($p<0.05$ by McNemar's test for paired data). In addition, the area of bruising was greater in the elbows that were flexed (median 0.55 cm² and maximum 4.88 cm² compared

with median 0 cm² and maximum 4.84 cm² in the elbows that were extended; $p<0.01$ by Wilcoxon's test for paired differences).

Thirty sites showed no visible bleeding after two minutes. One venepuncture site bled for over five minutes, but all the rest had stopped bleeding by 3 minutes 15 seconds. The time for bleeding to stop was unrelated to the size of the subsequent bruise ($p=0.1$, Spearman's rank correlation coefficient).

Comment

We conclude that the common practice of flexing the elbow after venepuncture is not an efficient way of preventing bruising in the antecubital fossa.

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Huntington's disease: deterioration in clinical state during treatment with angiotensin converting enzyme inhibitor

We report on a woman with Huntington's disease whose condition deteriorated dramatically during treatment with the angiotensin converting enzyme inhibitor captopril and improved on withdrawal of the drug.

Case report

A 47 year old woman who had been diagnosed eight years earlier as suffering from Huntington's disease was admitted to hospital for control of newly diagnosed hypertension (210/120 mm Hg). She had previously been managed at home with haloperidol 1.5 mg thrice daily. On examination she walked without help and had typical features of Huntington's disease, with diffuse involuntary choreiform movements, facial apraxia, and inability to protrude her tongue for longer than five seconds. Her higher mental functions were impaired, although she could communicate and follow simple commands. She was otherwise medically well and had no clinical features of end organ damage due to hypertension.

Haloperidol was continued and captopril 18.75 mg daily in divided doses started. Because her blood pressure was unresponsive the dose was increased and over five days she received a total of 468.75 mg. Her clinical state then deteriorated and she became bedbound and totally unable to communicate and showed generalised rigidity and incontinence. She did not recognise her family and required nasogastric feeding. At no stage had she had any hypotensive episode, metabolic derangement, or fever. Her blood pressure remained raised throughout, with systolic pressure varying between 220 and 180 mm Hg and diastolic pressure varying between 150 and 120 mm Hg. Extensive investigations including lumbar puncture, thyroid function tests, and computed tomography of the brain showed no cause for her altered neurological state. Captopril was stopped and her blood pressure eventually controlled with a combination of nifedipine, atenolol, and a thiazide diuretic. Her neurological state gradually improved, and five days after the captopril was stopped she had recovered her previous functional state. Her blood pressure was controlled, and she was discharged home.

Comment

Altered amounts of various neurotransmitters have been shown in the striatonigral system of patients with Huntington's disease,¹ although the underlying biochemical defect that causes the disease is unknown. In a necropsy study Arregui *et al* showed that the corpus striatum and substantia nigra of patients with Huntington's disease had diminished quantities of angiotensin converting enzyme.² This enzyme has been localised to the striatonigral pathway of rat brains in autoradiographic experiments with tritiated captopril.³

This patient's pronounced deterioration during treatment with captopril for hypertension and her subsequent recovery after withdrawal of the drug suggest that inhibition of angiotensin converting enzyme was the cause of her altered neurological state. This observation may have important

Bruising 48 hours after venepuncture using two different methods to promote haemostasis

	Total	No bruised	Median (range) area of bruise (cm ²)
Elbow flexed:			
Left arm	10	8	0.56 (0.3-62)
Right arm	10	7	0.39 (0.4-88)
Elbow straight:			
Left arm	10	3	0 (0.4-84)
Right arm	10	3	0 (0.1-84)

implications regarding the metabolic defect responsible for the clinical features of Huntington's disease. It also suggests a role for manipulation of the striatonigral neurotransmitter pathway in treatment and presymptomatic testing for this condition.

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Medical stereotypes and medical realities

Descriptions of various medical specialties by medical students show clear differences, which are described as "stereotypes."^{1,2} A stereotype requires not only that people agree on appropriate attributes but also that these attributes do not correspond with reality. As doctors in different specialties do actually differ³ many so called stereotypes might instead be accurate descriptions of true differences.

In this study the actual reasons for choosing a career in surgery or psychiatry were compared with perceived reasons. Each doctor was asked only one of three sets of questions: about their own reasons for entering the specialty; about the reasons in general that doctors entered the specialty; or about the reasons in general that doctors entered the other specialty (for example, surgeons were asked about psychiatry).

Methods and results

Altogether 192 doctors were asked to rate the importance of 25 reasons for choosing a specialty on five point scales. The doctors comprised 96 psychiatrists and 96 surgeons; half were consultants and half were registrars who had recently passed the FRCS or MRCPsych examination. Men and women were equally represented in all groups except consultant surgeons. Questionnaires were sent to home addresses with a stamped addressed envelope enclosed for their return.

Altogether 138 (72%) questionnaires were returned. The mean (SD) age of respondents was 30.3 (2.2) years and 30.2 (1.6) years for junior surgeons and psychiatrists, respectively, and 51.7 (7.6) years and 58.1 (7.6) years for consultant surgeons and psychiatrists, respectively.

Factor analysis of the 25 career motivations identified four factors (see below) that accounted for 67% of the total variance. Composite scores were derived for each factor and analysed by four way analysis of variance (specialty×group reporting×seniority×sex). No significant effects of sex or seniority were found. Stereotyping was identified by a significant specialty×group interaction.

Practical therapeutic success (seven items) measured the importance of effective treatments and technical procedures in deciding the choice of career. These were more important to surgeons ($p<0.001$, figure) with no evidence of an interaction or, hence, of stereotyping.

Interpersonal relationships (seven items) assessed the importance of close relationships with patients and the needs of the whole patient and of society. They were more important to psychiatrists ($p<0.001$), and there was a significant group×specialty interaction ($p<0.05$, figure): although surgeons said that interpersonal relationships were important to them, psychiatrists thought that this factor was not important to surgeons.

Living and career compatibility (six items) measured the importance of having reasonable promotion prospects and working hours compatible with family and social life. These were more important to psychiatrists ($p<0.001$), and there was significant evidence of stereotyping ($p<0.005$, figure): surgeons thought that this factor was more important to psychiatrists than psychiatrists did themselves.

Academic career and status (four items) measured the importance of a high academic status and adequate financial reward. These were more important to surgeons than psychiatrists ($p<0.001$), and there was significant evidence of

Mean importance (and 95% confidence intervals) of various reasons for entering psychiatry (□) or surgery (■) assessed by doctors for their own careers (self), for their own specialty in general (own), and for the specialty other than their own (other). (Specialties in the "other" column refer to the specialty being assessed, not to the specialty of the assessor.) The five points on the rating scale were coded as +3=extremely important, +2=important, +1=slight importance, 0=no importance or irrelevant, and -1=offputting.

stereotyping ($p<0.025$, figure): psychiatrists thought this factor of greater importance to surgeons than surgeons did themselves.

Comment

Surgeons and psychiatrists differed in the reasons for their choice of career, and those reasons were accurately perceived by other members of the same specialty—that is, there was no "autostereotyping."⁴ Stereotyping occurred, however, between specialties ("heterostereotyping"),⁴ but it was limited and asymmetric: one specialty stereotyped the other but not vice versa. Thus psychiatrists stereotyped surgeons by minimising the role of interpersonal relationships and overestimating the importance of academic career and status in the choice of career, while surgeons stereotyped psychiatrists by overemphasising the importance of having working hours compatible with personal and family commitments.

In conclusion, although medical stereotypes undoubtedly exist, many so called stereotypes are actually true perceptions of medical realities

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