# **Important precautions**

Taking and transporting specimen

Careful venepuncture (clotted blood)

Dispose of syringe and needle safely

Place blood in a leakproof container that has a screw cap with rubber liner. Tighten firmly

> Label specimen with patient's number and date of collection

Seal specimen in polythene bag, preferably using heat sealer, with request form attached outside

Send container to laboratory by secure route

Share information only with named staff in confidence

The need to discuss investigations for HIV infection with patients beforehand and to interpret the results to them afterwards is discussed elsewhere in this series. Except in special circumstances, permission to collect a sample for anti-HIV testing should have been sought by the doctor and expressed or implied by the patient. Clotted blood should be obtained by careful venepuncture without spillage or risk of an inoculation accident. The needle and syringe should be disposed of safely and the blood placed in a leakproof container, properly identified, and sent by a secure route to the laboratory.

The patient's identity and the suspected diagnosis should not be exposed, so numbers or codes rather than names may have to be used, even though the risk of misidentification is increased. In this delicate area information should be shared over the telephone only between individuals who know each other and written reports should be sent to named members of staff in confidence. All positive results should be checked again on a freshly drawn specimen. The consequences of failures and breaches of these procedures may be very serious for patients and prove costly to doctors. Because of the implications of positive laboratory findings for the patient's health, for his family and contacts, and for his social and professional life a high level of competence and sensitivity is to be expected from all who are concerned in instigating investigations for HIV infection.

Laboratory tests for HIV have increased understanding of AIDS and greatly facilitated diagnosis, management and control measures. However, to derive most benefit and do least harm with them they must be used wisely.

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The Western blot illustration was provided by J P Clewley, the electron micrograph by J E Richmond. "People who must not give blood" is taken from a Department of Health pamphlet, and the scanning electron micrograph by Dr David Hockley.

# Lesson of the Week

# Obstructive sleep apnoea and tonsillar lymphoma

# MARTIN KING, MICHAEL GLEESON, JOHN REES

Obstructive sleep apnoea has been associated with several disorders. In particular, narrowing of the upper airway by fat in obese subjects, by structural abnormalities of the jaws in children, and by enlargement of the tongue and larynx in acromegaly are well recognised causes.<sup>1</sup> Adenotonsillar enlargement may be a problem in children and has been related occasionally to sleep apnoea in adults.<sup>2</sup> Current treatment of obstructive sleep apnoea may include

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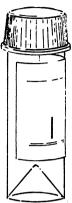
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Patients with symptoms of possible sleep apnoea need careful, expert examination of the oropharynx

weight loss, drug treatment, nasal positive airway pressure, or surgery. We describe a case illustrating the importance of careful examination of the upper airway in these patients.

#### **Case report**

A 66 year old man was admitted to hospital after a road traffic accident in which he fractured his left wrist. He reported that the accident had been caused by his falling asleep at the wheel. He gave a history of tiredness during the day with pronounced daytime somnolence for six to 12 months.



He had frequent vivid dreams and nightmares and had been told over many years that he snored heavily. His wife confirmed the loud snoring and said that she had noticed some slurring of his speech over the past six months. He had a medical history of hypertension and a myocardial infarction. He drank an average of 60-70 units of alcohol a week.

On examination he was found to be 115% of ideal weight. There were three lymph nodes 1-2 cm in diameter in the cervical region. He had a long soft palate and the tonsils were enlarged. The left tonsil felt firm. While in hospital he fell asleep easily throughout the day and snored loudly. A sleep study three days after admission showed obstructive sleep apnoea with 61 apnoeic episodes of at least 10 seconds' duration every hour, a maximum duration of approve of 40 seconds, and a minimum oxygen saturation of 80%. At the time he had drunk no alcohol for 72 hours.

Tonsillectomy with an uvulopalatopharyngoplasty was performed. At operation the tonsils were found to be enlarged and firm. On the left side lymphoid tissue extended down the lateral pharyngeal wall to the level of the laryngeal inlet. Postoperatively the daytime somnolence completely disappeared, as did the slurring of speech and his vivid dreaming. The improvement was noticeable from the first postoperative day. He was able to sit reading or watch television, which before operation would have induced sleeping in the daytime. A repeat sleep study one week postoperatively showed 18 episodes of obstructive apnoea an hour, with a maximum duration of apnoea of 28 seconds and a minimum oxygen saturation of 85%.

Histologically the tonsils showed a centrocytic-centroblastic diffuse B cell lymphoma thought to be of low grade malignancy. No chemotherapy was given. At follow up six months postoperatively there was no new pharyngeal lesion. The cervical lymph nodes were slightly larger and the spleen was palpable. He remained completely free of tiredness and daytime hypersomnolence. There were no complications of the uvulopalatopharyngoplasty.

#### Discussion

The obstructive sleep apnoea in this elderly man had produced increasing symptoms over the six months before his presentation and was probably related mainly to the lymphomatous tonsils, possibly superimposed on a narrow oropharynx and high alcohol consumption. Removal of the tonsils together with uvulopalatopharyngoplasty cured the prominent symptoms of sleep apnoea and reduced the apnoeic episodes to less than 30% of the preoperative level. The fact that the apnoea index postoperatively was still 18/hour suggests that enlargement of the tonsils was not the only reason for obstructive apnoea. Probably the tonsillar enlargement

### DOCTORS IN SCIENCE AND SOCIETY

#### A literary fellow of The Royal Society

At the time that Oueen Anne came to the throne Samuel Garth's reputation as wit, poet, and physician was unrivalled. He had continued to publish poetic work, his translation of Plutarch's Life of Otho having come out in 1700, and in 1702-the year of Queen Anne's accession-he had translated Demosthenes's Second Philipick. In that same year he was elected a censor of the Royal College of Physicians. His friendship with Sloane lasted throughout his life. On many occasions they attended patients together, and among the letters written by Garth to Sloane are several requesting medical help. Garth's manner could be brusque. He once wrote to Sloane: "If you can recommend this miserable slut to be fluxed you will do an action of charity." On another occasion he wrote more politely: "Be so good as to call at my house, Mrs Garth is ill." In 1705 he moved from his home near St Martin-inthe-Fields to the highly fashionable area of St James's, near to St James's Palace and around the corner from Marlborough House, where the Duke and Duchess of Marlborough lived. In the following year Sloane proposed Garth as a member of the Royal Society, presumably on grounds of friendship rather than scientific prowess, and his election is recorded immediately before the reading of a letter from Mr Leeuwenhoek from Holland concerning the appearance in the microscope of the gut of a woman executed.--CHRISTOPHER BOOTH

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precipitated the problem in a patient predisposed to obstruction. Because this was thought likely preoperatively an uvulopalatopharyngoplasty was performed in conjunction with the tonsillectomv.

Night to night reproducibility of numbers of apnoeic episodes is very good when episodes exceed 15/hour.3 The difference between preoperative and postoperative studies in this patient greatly exceeded the variability of such studies.

Tonsillar enlargement is common in children, in whom it may be associated with sleep apnoea. This association has been reported in adults.2 In one case the tonsillar enlargement was caused by a non-Hodgkin's lymphoma. There has been one report of obstructive sleep apnoea associated with lymphocytic lymphoma producing cervical and submandibular lymph node enlargement but no tonsillar abnormality.4 In that case the severity of the apnoea varied as the node size changed with the response to chemotherapy. In our patient there was no local recurrence in the tonsillar area after surgery and in view of the histological findings chemotherapy was not warranted.

This case of lymphoma presenting as obstructive sleep apnoea illustrates the importance of careful examination of the oropharynx in patients with features of sleep apnoea. There are many possible presenting features of sleep apnoea. Daytime somnolence, snoring, hypertension, and psychiatric changes are not always fully investigated to exclude underlying nocturnal apnoeas. These patients may be referred initially to thoracic physicians, cardiologists, neurologists, or psychiatrists. This case shows that symptoms of possible sleep apnoea require relevant investigation and that such patients should be assessed by an ear, nose, and throat specialist.

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#### Can prostatectomy be done as a "short stay" procedure?

An elective uncomplicated prostatectomy undertaken by the transurethral method in a urological unit is certainly a short stay procedure. All of the relevant preoperative investigations to confirm the presence of bladder outflow obstruction, such as flow rates and ultrasound measurements of residual urine, may be undertaken in an outpatient clinic together with routine haematological examination, a midstream urine test, radiology of the urinary tract, routine chest x ray examination, and electrocardiography where appropriate. The length of stay postoperatively depends on the timing of removal of the perurethral catheter inserted at the end of the operation. This is usually between 24 and 48 hours after surgery, depending on the blood loss, and if spontaneous micturition is established the patient may be discharged home. Patients with chronic retention of urine require a longer period of catheter drainage, and it is often preferable to discharge them home with a catheter in situ for subsequent booked readmission and trial removal. About 40% of patients undergoing prostatectomy in the United Kingdom are admitted as emergencies for retention of urine. A longer period in hospital is inevitable in this group, related mainly to the delay in obtaining the necessary theatre time to deal with them. Some units have obviated this problem by discharging such patients with a catheter in situ and booking them in for elective surgery later. Unfortunately, factors other than purely medical reasons often unduly delay the early discharge of patients after prostatectomy, particularly in the elderly. The major problems in this respect are the social circumstances of the patient, who sometimes lives alone or with an infirm spouse and negligible family support. Full cooperation of the social services is required to return patients safely into the community, and the time spent achieving this may considerably add to the period spent in hospital.-J C GINGELL, consultant urologist, Bristol.