Oesophageal obturators

Oesophageal obturators are popular in the USA. The obturator is a long cuffed tube attached to a facemask. The tube is passed blindly into the oesophagus and the cuff is then inflated to isolate the oesophagus and stomach from the airway. In the original version the oesophageal obturator tube is blocked distally and a series of holes at laryngeal level permit air blown down the tube to pass from the tube into the larynx. In a later version the oesophageal tube is not terminally sealed and this allows for aspiration or pressure relief of gastric contents. A second orifice in the mask is used for ventilation. Hazards in the use of these tubes include trauma to the oesophagus and stomach, the risk of inducing vomiting and gastric rupture, and, paradoxically, the rare occurrence of unrecognised tracheal intubation.

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Epidemiology

An outbreak of gastrointestinal illness associated with consumption of raw depurated oysters

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A lunch time reception was held in March 1985 for French visitors as part of a twin town celebration at which a seafood menu which included raw oysters was served. The next day, while the French visitors travelled home, some of the English guests became ill with diarrhoea, abdominal pain, and vomiting, and an investigation was begun.

Methods

A cohort study was conducted using a short postal questionnaire which asked about the foods eaten, occurrence of illness, and the nature and onset time of symptoms. After consultation with the French Department of Health a translated questionnaire was delivered to each of the French visitors via their local mayor.

Faecal samples collected from four guests several days after onset of illness were examined bacteriologically. The source, trans-

portation, storage, and preparation of each of the foods were documented, and the relevant premises visited and examined. Bacterial monitoring records from the oyster fishery were reviewed.

Results

Replies were received from all of the 29 English guests and from 22 of the 25 French guests. Of the 51 responders, 13 (25%) became ill within 48 hours of the meal (median incubation period was 36 hours) and a further three suffered gastrointestinal upset during the week after the reception. The main clinical features were diarrhoea, nausea, and loss of appetite, and half those affected also complained of vomiting.

For the calculation of food specific attack rates a case definition of diarrhoea, abdominal pain, or vomiting beginning within 48 hours of the reception was used; those whose illness did not meet the case definition were excluded from the analysis. Very few people drank non-alcoholic beverages, and of the six available food items, only the oysters were significantly associated with illness (table); all of the 13

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Food specific attack rates

Food	Number		Number		Probability (Fisher's exact test two tailed)
	Who ate*	Ill (%)	Who did not eat*	Ill (%)	
Fish balls	41	13 (32)	5	0	NS
Tomato dressing	26	9 (35)	19	4 (21)	NS
Mussels	42	12 (29)	5	1 (20)	NS
Cockles	43	13 (30)	3	0	NS
Oysters	36	13 (36)	10	0	p<0.01
Prawns	43	12 (28)	1	0	NS

*Excluding people who did not reply to particular food items.
NS=not significant, all >0.2.

ill people ate the oysters. For some of the food items, however, nearly everyone ate a portion, and comparisons of attack rates with people who did not eat a food item could be only tentative. The preparation details of the other foods suggested that they had been adequately cooked, and the oysters were eaten raw.

There were isolated reports of gastrointestinal illness associated with oysters in the town at the same time among people who had not attended the reception. An unexplained finding was the markedly different attack rates between the English (11/20, 55%) and the French (2/16, 13%). Pathogenic bacteria were not cultured from any of the four stool specimens.

Oysters

Coliform counts from the oyster fishery on the River Teign in Devon, three days before despatch of the suspect oysters, showed an initial figure before treatment of 35 000/100 ml of body tissue, falling to 330/100 ml after 72 hours depuration. Around 500 Pacific oysters, already depurated for 72 hours, were brought from the fishery and transported to a fish market from where the retailer collected them the following day. They were then stored in a depuration plant and treated with seawater circulated continuously through ultraviolet light for 15 days until taken to the reception. Water in the tank where this prolonged depuration took place was circulated through the plant for at least 72 hours before introduction of the oysters.

Discussion

The pattern of illness in this outbreak was similar to that of acute non-bacterial gastroenteritis, also described as "Norwalk like"; the illness was of short duration, over half those affected vomited, the median incubation period was 36 hours, and recognised bacterial pathogens were not isolated from convalescent stool specimens.

Unfortunately no acute stool specimens were available for electron microscopy.

The food specific attack rates suggested that oysters were the vehicle of infection. The difference in attack rates between the English guests and their French visitors was unexplained. Possibly the French guests had previously been exposed to the particular strain of virus.

Large outbreaks of viral gastroenteritis have been reported associated with the consumption of raw oysters,^{2,4} and in some of these outbreaks the oysters had been cleansed by depuration for at least 72 hours.^{4,5} Although harvested originally from grossly polluted waters, the oysters implicated in the present outbreak underwent prolonged depuration. There was, however, some doubt about the second 15 day depuration period in that this plant was occasionally topped up with untreated seawater while in operation, and we could not be certain that this had not occurred. Nevertheless, the outbreak suggests the possibility that even prolonged depuration may not remove certain viruses from oysters. In the belief that relaying in a natural environment may be more efficient than depuration at removing pathogenic viruses, it has been suggested that oysters grown in heavily polluted waters should be relayed in approved clean waters for several days before cleansing in a tank depuration system.⁶

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Length of survival of patients with acquired immune deficiency syndrome in the United Kingdom

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Abstract

An analysis of the lengths of survival of patients with the acquired immune deficiency syndrome presenting with different opportunistic diseases was performed using epidemiological data routinely collected at the PHLS Communicable Disease Surveillance Centre. The overall crude case fatality rate was 55.4% (93/168). The median survival times were: 21.2 months for Kaposi's sarcoma, 12.5 months for *Pneumocystis carinii* pneumonia, and 13.3 months for other opportunistic infections. The shortest median survival time (6.6 months) was found for

those with both Kaposi's sarcoma and *P carinii* pneumonia. There were significant differences between durations of survival of patients with Kaposi's sarcoma and those with all other diseases, which indicated impaired cellular immunity apart from opportunistic infections.

This analysis shows that those with Kaposi's sarcoma alone have the most favourable prognosis.

Introduction

During 1981 reports of patients with the acquired immune deficiency syndrome (AIDS) in the United States were published,¹ and in December of that year the first case of AIDS diagnosed in a homosexual man in Britain was documented.² In 1982 a surveillance scheme was set up by the Public Health Laboratory Service Communicable Disease Surveillance Centre (CDSC) in collaboration with the Communicable Disease (Scotland) Unit. Up to 1 June 1985, 178 cases were reported. We reviewed these cases to assess the duration of survival.

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