due to muscle necrosis resulting from the assault. The activity was, however, much higher than would be expected from the observed damage, and assault does not explain the renal impairment.

Naloxone is a short acting specific opiate receptor antagonist with a plasma half life of only 68 minutes. The greater the amount of narcotic ingested the larger the amount of antagonist needed to inhibit competitively its effect. This patient had ingested a large dose of narcotic, the effects of which were apparently prolonged by renal and hepatic impairment. Although the initial 0.4 mg of naloxone was effective the dose interval was too long and the patient had severe respiratory depression 25 hours after admission. The subsequent infusion rate of 0.2 mg/h was also insufficient to maintain adequate respiration and the patient was again comatose 37 hours after admission. When the infusion rate was increased to 0.8 mg/h respiration was adequate.

Clearly, the difficulty with this patient was maintaining therapeutically effective naloxone concentrations. The manufacturer suggests that repeated administration of naloxone may be necessary but gives no indication of the dosage and frequency of administration. To maintain therapeutically effective concentrations of a short acting drug, such as naloxone, when antagonising the effects of a large dose of much longer acting agonist requires either frequent bolus doses or an infusion of adequate concentration. Thus it is important to remember when treating gross opioid overdosage in patients with renal and hepatic failure that large doses of naloxone may be required over a long period.

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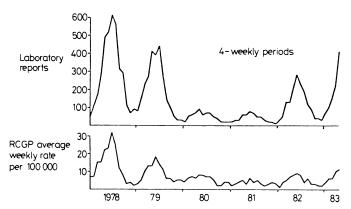
Communicable Diseases

Rubella surveillance

Prepared by the Public Health Laboratory Service Communicable Disease Surveillance Centre

The last major epidemic of rubella was in 1978 and 1979, when most areas of Britain experienced an outbreak in one or other of those years. This was followed by three years (1980-2) of small outbreaks.

Reports of rubella to the Royal College of General Practitioners and to the Communicable Disease Surveillance Centre, and from local notification systems in Bristol, Newcastle, Leeds, and Manchester suggest that the rubella outbreak



Surveillance of rubella between 1978 and 1983.

this year is larger than those of 1980-2 but not as large as in 1978-9 (figure). For the four week period ending 31 May 1983, the average weekly rate of reports of clinical rubella to the Royal College of General Practitioners was 16.9 per 100 000 compared with 22.6 in the four week period ending 6 June 1978, 17.8 in the four week period ending 5 June 1979, and 7.5, 5.9, and 8.5 respectively for 1980-2. Laboratory reports to the Communicable Disease Surveillance Centre so far number 1115 this year (weeks 1-22) compared with 1315 for the equivalent period in 1978 and 1342 in 1979 and with 322, 234, and 673 respectively for 1980-2. Data from four of the cities (table) where rubella is notifiable show the usual patchy distribution, with Bristol and Newcastle recording fairly large outbreaks.

Notifications of rubella in four cities

	Notifications weeks 01-22					
_	1978	1979	1980	1981	1982	1983
Bristol Manchester Leeds Newcastle	586 963 685 113	318 188 2398 567	314 160 440 157	63 57 230 88	90 34 183 51	1178 212 456 857

Outbreaks of rubella usually peak in June, so that numbers may start to decline in the next few weeks.