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Burns

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Burns due to hot cooking oils, either by direct contact or by the effects of fire, have posed a problem for most burns units. Burns due to hot cooking oils have been a significant cause of morbidity in the past [1–3]. Pegg and Seawright [4] showed that between the years of 1967 and 1981, there was an increasing hazard from hot oil injuries. The Royal Brisbane Hospital Burns unit in north-eastern Australia showed a rising incidence of 5.1–11.3% of all burns admissions between 1967 and 1981.

To assess the current problem with regard to burn injuries due to hot cooking oils, a review of the burns admission notes for all the patients admitted to the Stoke Mandeville Burns Unit from 1995 to 1999 inclusive was carried out. The following information was collected.

1. In each year, the proportion of all admissions that were caused by cooking oils or fat.
2. The number of burns caused directly by contact with hot oil, and burns from oil or fat catching fire.
3. The sex and age range of the patients involved.
4. The extent of the burn, both in area and depth.
5. Other social factors, particularly alcohol ingestion, mentioned in the notes.

Of the 43 patients whose injuries were caused by cooking oils, 22 were male and 21 female. Ages ranged from 5 to 92 years with a mean age of 45 years. The annual incidence in the 5 years from 1995 to 1999 inclusive is detailed below, in Table 1.

It can be seen that there is in this part of the United Kingdom, a falling incidence of burns caused by cooking oil.

The percentage of burns due to hot oil injuries has fallen from 11.1% in 1995 to a figure of 1.9% in 1999. The admission figures to the burns unit at Stoke Mandeville for the years 1995–1999 have been 135, 124, 145, 130 and 104, respectively. The number of admissions due to hot oil injuries for those years have been 15 (11.1%), 7 (5.6%), 10 (6.9%), 6 (4.6%) and 2 (1.9%), respectively (see Fig. 1).

When the number of oil burns caused by flame from burning oil or fat is considered, there were four admissions due to

### Table 1

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<tbody>
<tr>
<td>Total admissions to the burns unit</td>
<td>135</td>
<td>124</td>
<td>145</td>
<td>130</td>
<td>104</td>
</tr>
<tr>
<td>Admissions due to hot oil injuries</td>
<td>15</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>2</td>
</tr>
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</table>

**Fig. 1.**

- % of burns due to hot oil injuries

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Letter to the Editor
A 5-year retrospective study: burn injuries due to hot cooking oil
to cooking oil fires in 1995, 2 in 1996, 2 in 1997, 1 in 1998 and no admissions in 1999. A total of 91% of burns caused by contact with hot oil were full thickness or deep dermal and required tangential excision and skin grafting. Similarly of the burns caused by fire all required surgical intervention.

The falling incidence of burns in this unit, both from hot cooking oil and from oil fires, is clearly to be welcomed. Even though health and safety issues have improved in recent years and the incidence of hot oil injuries has been shown to be on the decline in this retrospective study, it is important to stress that there is no reason to decrease vigilance. We would advise having fire blankets available whenever cooking with hot oil and never to try and remove the danger by throwing the pan out of a window or door or by adding water. Increased community training in first aid would reduce the morbidity of burn injuries due to hot cooking oils. We would also advocate the increased availability of safety advice and education incorporated with the sales of cooking oils and cooking appliances.

References