We found a peculiar distribution of the erythema ab igne in many elderly women, mainly in the middle third and sometimes in the upper third of the leg, and even sometimes more marked on one leg than the other. The reason seems to be that these women, walking in and out of the kitchen into the farm-yard, wore boots, some time ago leather boots, now rubber cut down to bootee length, and the upper third of their legs was partially protected by their skirts.

The conditions we laid down to accept a case as being a turf fire cancer were: (1) The presence of erythema ab igne. (2) The absence of any history of varicose veins or varicose ulceration. (3) Histological features which we regarded as typical, low-grade squamous cell carcinoma but with increased number of dilated blood vessels and streaks of hæmosiderin, which appear brown in the dermis, and also increased melanin.

Applying these principles over the last five years, we have had 162 cases of this type of cancer in women, mostly over 65, all from rural areas and all with a history of working with or having worked for a long period with peat fires. To know the cause of a disease is sometimes to eliminate it. The widespread use nowadays of bottled gas for cooking purposes is leading to the elimination of the open turf fire. This is clearly a beneficial social change which should lead to a progressive reduction of the incidence of this form of cancer in women in Ireland.

The Incidence of Alcohol Intolerance in Women with Tumours of the Uterus, Ovary or Breast [*Summary*]

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The paper of James *et al.* (1957) was followed by other reports of alcohol pain in carcinoma, including cervix (Healy 1959), uterine body (Bichel 1959) and breast (Braun & Schnider 1958). This symptom has also been described in lesions showing no evidence of neoplastic change (Alexander 1953, Conn 1957), while slight pain, often in the shoulders and arms, is one of the features of an apparently harmless alcohol syndrome that affects some people all their lives (Conn 1957, and 1966, personal communication, Snell 1966, Brewin, 1966*b*). Bichel (1959) made a plea for the recognition of other kinds of alcohol intolerance (nausea, dyspnœa, flushing and so on), but considered that these symptoms, like alcohol pain, occurred mainly in Hodgkin's disease. Recent evidence (Brewin 1966*a*, *c*) suggests widespread intolerance in neoplastic disease, including not only obviously abnormal effects (such as pain or bleeding at a site of disease, or bizarre attacks of systemic distress, after very small amounts of alcohol), but also unexplained loss of desire for alcohol, perversion of smell or taste, burning dysphagia in spite of dilution, and lowering of threshold for normal intoxicating and hangover effects. A single pathogenesis, responsible for all these effects, is suggested by the many features which they share, including lack of any correlation with tumour site or spread, frequent onset long before diagnosis, occasional transient appearance at the time of treatment, the same uneven pattern of disease incidence, and the same instances of immediate return to normal tolerance, or shift to a new kind of intolerance, with modest doses of radiotherapy or certain drugs.

Table 1

Incidence of alcohol intolerance in 332 women with neoplastic disease

Site of disease	*Total cases*	*Cases showing alcohol intolerance* *No.*	*%*
Uterine cervix	106	64	60
Uterine body	58	23	40
Ovary	61	17	28
Breast	107	16	15

The incidence found in tumours of the uterine body is not significantly different from that found in tumours of the ovary ($P > 0{\cdot}05$)

Table 1 shows the result of a new survey, involving 332 women not used in previous estimates of incidence, and based mainly on the taking of a very careful history in every case. The most striking finding is a much higher incidence of alcohol intolerance among 106 women with cervical carcinoma than among 107 women with breast carcinoma. It is thought that this difference is real, since both groups came from the same geographical area, contained the same proportion of 'drinkers'[1] (cervix 54%, breast 57%), had a similar average prognosis, with many early as well as late cases, and were questioned in exactly the same way by the same observer, who was equally interested in both diseases and had no working hypothesis or conscious bias of any kind. Table 2 shows that the difference is as true of changes in taste or threshold as it is of pain or other frankly abnormal effect.

[1]Drinkers': patients normally unlikely to go more than 2 months without tasting alcohol. 'Regular drinkers': patients normally unlikely to go more than a week without tasting alcohol

Table 2
Incidence of different types of alcohol intolerance in 106 women with carcinoma of cervix and 107 women with carcinoma of breast

	Type of intolerance							
							Lowered threshold	
Site of disease	*Pain*	*Bleeding*	*Attacks*	*Other abnormal effects*	*Loss of desire for alcohol*	*Change in taste or dysphagia*	*Intoxication, hangover*	*Gastro-intestinal*
Cervix	10	4	27	7	12	11	11	17
Breast	1	–	2	4	1	2	3	6

Figures represent actual number of patients experiencing each type of intolerance. Some experienced more than one kind, either concurrently or as a result of a 'shift'. Loss of desire or distaste attributable to anorexia, or to previous alcohol symptoms, is excluded

Assessment may be difficult, especially when a patient is not prepared to risk further alcohol after a single incident. Cases where there was any doubt were fully documented, then classified on the spot as 'probable' or 'possible' without regard to time of onset or probability of being related to the disease. 'Probable' cases were later found to be more than 3 times as common in the cervix group (cervix 27, breast 8) and were accepted. 'Possible' cases were all rejected.

The incidence is as high as that previously found to apply only to 'regular drinkers'[1] (Brewin 1966*a*). This appears to be due mainly to the use of even greater care and tact when taking the history, with absolute privacy in every case and a consistent policy of continuing to talk for several minutes to any patient who initially denied intolerance or said that she did not take alcohol; paying particular attention to family celebrations, toasts at weddings or christenings, and to medicinal use, yet avoiding leading questions about specific types of intolerance. As a result, the incidence in regular drinkers shows no significant difference (cervix 12 out of 17 in the new series, 10 out of 19 in the old; breast 3 out of 20, previously 2 out of 20), whereas the incidence in those not in the 'drinkers' category shows a remarkable change (cervix now 25 out of 49, previously 1 out of 34).

The proportion of cervix and breast cases showing either a local effect at the tumour site, abolition of intolerance by radiotherapy or surgery, or onset within a 3-year period before or after diagnosis, is not significantly different (cervix 50 out of 64, breast 10 out of 16: $P > 0{\cdot}05$). Very few of the other cases show any positive suggestion of not being similarly related to the tumour, evidence being frequently lacking due to a natural reluctance to resume alcohol.

Of the 54 cervix patients whose intolerance was present before diagnosis, 36 (67%) had experienced it for more than a year, including 20 (37%) for more than 3 years. Of 34 Stage 1 cases, 14 showed intolerance. Of 8 carcinoma-in-situ, 4 showed it. In theory, therefore, these reactions to alcohol could make a significant contribution to earlier diagnosis. Although there are many other causes, some benign, it would seem sensible for any woman who develops alcohol intolerance to have at least a clinical and cytological check on her cervix.

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Comparative Aspects of Bone Tumours in Man and Dog

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Primary Bone Tumours

Osteosarcoma is the most common primary tumour of bone in both man and dog. The condition is common in middle age in the dog whereas in man two-thirds of the cases occur in the first three decades of life. Malignant change occurs in some cases of Paget's disease in man but Paget's disease does not appear to occur in the dog. The great majority of osteosarcomas arise in the metaphysis of a long bone in both species. Common sites in man are distal femur and proximal tibia. Tumours occur in these sites in the dog but more commonly the proximal humerus and distal radius are involved. These are non-weight-bearing areas in man and the incidence of osteosarcoma is low. Osteosarcoma is much more common in