through poor social conditions and isolation either in a remote rural community or within a subculture in an industrialized town experience overcrowding, loss of privacy, and a sense of estrangement from normal society which facilitates breakdown of normal standards.

Such families commonly make heavy demands on medical and social services, so that the doctor or his colleagues in the community may be the first to suspect incestuous behaviour. The law reacts in a way which reflects society's abhorrence of paternal incest and the offender is usually committed to prison, where his fellow prisoners may inflict their own crude additional punishment for his offence. On discharge, if the family has not broken up, the incestuous relationship is commonly resumed in conditions made worse by the father's conviction. Early identification of families at risk and prompt intervention may offer some prospect of prevention.

Such families need sensitive, long-term social case work and major efforts to draw them into society. The high sexual drive of the fathers, whether due to lack of inhibition or biological excess, may be reduced by medication, and effective industrial rehabilitation might well be rewarded by a reduction in antisocial behaviour. Unless these family units are able to function more normally, they will continue to reproduce in each new generation the disordered behaviour of the last.

Differences in Thyroid Cancer

The behaviour of thyroid cancer is extremely variable. Some tumours remain occult and either are discovered incidentally during necropsy or else produce deposits in the neighbouring cervical lymph nodes—the miscarried lateral aberrant thyroid. In other cases there is the appearance of a well-differentiated skeletal metastasis in association with a longstanding goitre. There are also rapidly growing cancers that invade the surrounding tissues relentlessly, metastasize widely, and are among the most malignant of tumours.

Recently a rather different thyroid cancer, the medullary carcinoma, has been described. It is composed of solid cords of uniform small cells separated by a fibrous stroma in which amyloid is usually present. Despite its undifferentiated appearance it is slowly growing, metastasizes late and chiefly to the regional lymph nodes, and may kill only after many years. It arises from the parafollicular, or C, cells, and secretes calcitonin. Sometimes 5-hydroxytryptamine and prostaglandins are also secreted, and the tumour has been associated with chronic diarrhoea and rarely with the carcinoid syndrome and Cushing's syndrome. It also has a genetic association with pheochromocytoma.

K. Franssila has recently reviewed 231 cases of thyroid cancer that occurred in Finland between 1958 and 1962.

All were carcinomata apart from one lymphoma. He classified the carcinomata into four categories: papillary, follicular, anaplastic, and medullary. Papillary cancer accounted for nearly half the cases, follicular and anaplastic cancer for a quarter each, and medullary carcinoma for the remaining 4%. The papillary tumour occurred much more frequently in women than did the other tumours, and it was spread over a wider age range than the other cancers, which occurred principally in elderly people.

There was also a difference in behaviour between the three tumours derived from follicular cells. The papillary cancer (like the medullary carcinoma) had the best prognosis, 83% of cases surviving for five years. It sometimes remained occult, and it frequently tended to metastasize to regional lymph nodes. Local infiltration was usually a late occurrence, and distant blood-borne spread was very uncommon. The follicular tumour, by contrast, had a 50% five-year survival and showed little tendency to infiltrate locally or spread to the local lymph nodes, but it was characterized by frequent haematogenous spread, especially to the bones and lungs. Anaplastic carcinoma had by far the worst prognosis, only 16% of patients surviving for five years. Early local infiltration was the rule, so that almost half the cases were inoperable when first seen. Metastases in regional lymph nodes and distant haematogenous deposits were common, being intermediate in frequency between the patterns noted in the other two types of cancer, and the lungs were principally affected. Skeletal metastases were much less common than in follicular carcinoma.

This work shows how the histological types of thyroid cancer can be correlated with the behaviour of the tumour and the patient's survival. The papillary, follicular, and medullary carcinomata appear to be biologically distinct tumours. It is noteworthy that the thyroid cancer that follows exposure to ionizing radiation is nearly always papillary. In contrast Franssila found that follicular and anaplastic tumours occurred fairly frequently in goitrous thyroids. It would appear that anaplastic carcinoma often derives from a preceding follicular tumour and less frequently from a papillary one.

Radiation Menopause

Though it is still employed in some centres, the treatment of dysfunctional uterine bleeding by induction of a radiation menopause has been largely superseded by hysterectomy. Chief among the reasons for this is the belief that patients treated by irradiation have an increased liability to the development of malignant disease in the genital tract, and a recent paper by D. S. Bannford and H. Wagman draws attention again to these risks.

The radiation menopause has also been criticized on