POST-CRICOID CARCINOMA

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THIS short paper indicates the incidence of post-cricoid carcinoma in the Portsmouth Hospital Group area over a ten-year period from 1947 to 1957.

The Portsmouth Group is compact, consisting of the City of Portsmouth and the neighbouring townships of Gosport and Fareham, together with certain rural hamlets and small towns, the total population being estimated at about 350,000. There was dense overcrowding before the war, but the housing estates built since have absorbed a considerable proportion of the population. Heavy industry is provided by Her Majesty's Dockyard and allied establishments. There are a number of factories engaged in light industry. Members of Her Majesty's forces form an appreciable group and are excluded as they are treated in Service hospitals. A large number of elderly and retired persons also reside in the area, the climatic conditions being good and the atmosphere remarkably free from smoke. Several cases have been included from the Chichester area, which is visited by one of the Portsmouth laryngologists.

After the inception of the National Health Service, all specimens for histological examination were referred to the Portsmouth Group Central Laboratory and the Director of the Radiotherapy Department, Mr. Gunderson, was invariably consulted at an early stage on the advisability of radical surgical intervention and the radio-therapeutic management.

The number of cases collected is 41, of which the majority were over 65 years old, 15 males and 16 females, but there was a small group of young persons, 1 male and 3 female.

It is considered that these cases comprised a great majority, but not all, of those arising in the area served by the Group Hospitals. It is also felt that all were genuine cases of post-cricoid carcinoma, although in very few instances the tumour might be more properly regarded as having arisen in the pyriform fossa. It is not always easy to be certain in more advanced cases of the precise origin of the growth. Biopsy made in all cases revealed squamous-celled carcinoma in various stages of differentiation. All cases treated by radiation received high voltage therapy and none have been subjected to radio-active cobalt. In the 25-35 age group, 1 male, 2 female. 35-45 group, 1 female. 45-55 group, 3 male, no female. 55-65 group, 2 male, 1 female. Over 65, 15 male, 16 female. Of those who received high voltage X-ray therapy alone, 2 were alive and well at the

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end of the five-year period. The prospects of survival of cases treated by high voltage radiotherapy being on the whole poor, it was decided to subject cases considered suitable to radical surgery. These received pharyngo-laryngectomy with block dissection of the side of the neck on which enlarged glands were palpated. No cases were found suitable for conservative surgery, the larynx on examination afterwards being invariably invaded by the growth. In the first case after pharyngo-laryngectomy a primary Thiersch grafting was performed over a portex tube triangular in section and satisfactory post-operative swallowing was obtained, although the patient died in just under two years with recurrences.

In the second case an elderly woman, who had been sent back from Africa as inoperable with a gastrostomy, mediastinitis had already taken place in the perforation of the growth. It was therefore thought advisable to perform the Wookey type of operation. After the first stage a nodule appeared in the middle of the large skin flap, which was excised and proved to be malignant. The second stage was thereafter carried out with good immediate results. Because of the possibility of unsuspected malignant deposits being present in the wound, it was considered that the second-stage operation of Wookey, despite increased hospitalization, might be preferable and therefore the subsequent cases were all operated on by that method. It was not possible to complete the second stage, that is the reformation of the pharynx by skin flaps, in several cases because of the frailty of the patient. In one case, a man of 57, a certain amount of cutaneous breakdown occurred, which might have been averted by more adequate immediate post-operative splinting of the patient's head and neck. This case has since been treated by the plastic surgeons with two-layer skin flap coverage of the small fistulae which remained and a good result has been achieved.

Conclusions can be drawn from the radical operative treatment by Wookey's method, admittedly in a small number of patients (12 in all). With the modern methods of anæsthesia, supplemented by maintenance of circulating blood-volume as required, patients of any age appeared to stand even extensive and prolonged surgery extremely well. There was one anæsthetic death, the cause of which was known and could have been avoided, otherwise immediate mortality was nil. Serious post-operative stenosis did not occur except in one case later on from malignant deposits in neck gland. The second stage closure is relatively simple associated with very little or no shock. It is important to provide good fixation of the head and neck by splintage, especially after the first stage to avoid any breakdown of the skin flap and subsequent infection and scarring, which makes the subsequent closure much more difficult. Even after what appeared to be adequate radical surgery, malignant deposits in the neck glands tended to appear at varying intervals post-operatively. Spread may also occur

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directly and by blood and lymphatic channels, as is usual with carcinoma. High voltage X-ray of the neck glands proved to be only palliative, the growth in general being extremely radio-resistant. Disease in the small group of young persons encountered appeared to advance very rapidly and appeared to be surgically intractable. The tumour was invariably well advanced when first seen. Apart from the group of young persons already mentioned, all cases operated on gained weight and some were able to return home swallowing for a period of comparatively pleasurable existence. They were also relieved of malignant ulceration of the hypopharynx which causes great distress when untreated. On the whole, it is felt that the results are disappointing and we are as yet unable to record a single five-year cure, but the work is not entirely unrewarding. It may well be that one one-stage operation is preferable, but, though the disease is not extremely rare, it is not often present in a form amenable to surgery and experience is hardly gained.

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