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DIAGNOSIS AND TREATMENT OF MULTIPLE PRIMARY CARCINOMAS

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32 cases of double primary cancer had been treated in our hospital from January, 1984 to March, 1994. Among them, 21 cases in male and 11 cases in female, the ratio of male and female is 1.9:1, the age ranged from 37 to 84 years old, the median age was 60 years old. 8 of them were synchronous carcinoma and 23 were metachronous carcinoma, the period from first to second cancer ranged 8 months to 8 years and 3 months. 26 of the 32 patients were performed radical resection and radiotherapy and/or chemotherapy treatment. The postoperative survival rate of 1, 3 and 5 year's were 100.0%, 65.3% and 42.3% respectively. 2 patients survived over 10 years with no tumor. The other 6 patients were later stage when fund the second primary cancer, palliative operations were only performed for them and they survived ranging from 5 to 15 months.

Key words: Multiple, Primary carcinomas, Operation.

The incidence of multiple primary carcinomas increased in resent years. This is may due to the changes of the people's life style, life prolonged, environmental pollution and the primary cancer coming to the knowledge as the development of the medical science. Radical resection is the most effective treatment for the multiple primary cancer. From 1984 to 1994, 32 patients with double primary carcinomas were hospitalized in our hospital and 26 of them were performed radical resection. The results are reported as follow.

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MATERIALS AND METHODS

Diagnosis

Multiple primary carcinomas means two kinds or over two kinds of deferent primary lesions develop in same one patient synchronously or metachronously. These lesions developing within 6 months is known as synchronous carcinomas, otherwise, they developing beyond 6 months is known as metachronous carcinomas. According to the criterion of Warren and Gates in 1932: 1. All tumors must be malignant; 2. Each tumor must has its distinct pathologic form; 3. Metastasis tumor must be differentiated from multiple primary carcinomas and ruled out. In our data, all the 32 patients with double primary carcinomas were operated on and has histopathology diagnosis. Some puzzle cases were distinguished from the metastases tumor by immunohistochemical method.

Clinical Data

Twenty-six cases of double primary carcinomas were treated from 1984 to 1994. 18 in male and 8 of in female, the age ranging from 41 to 71 years old. All the 26 patients were performed radical resection and were followed up from 3 to 11 years. The survival rate of 1, 3 and 5 year's are 100.0%, 65.3% and 42.3% respectively. 2 patients survived beyond 10 years with no tumor. No operative death in our data. Table 1 and Table 2 shows the detail.

Table 1. 26 cases double primary cancer

No. of cases	Age's	1st cancer	2nd cancer	Synchronous	Metachronous
3	45, 47, 60	Breast	Breast	0	3
3	51, 56, 58	Breast	Uterus	1	2
2	61, 65	Kidney	Colon	0	2
4	41, 43, 50, 71	Stomach	Colon	2	2
5	54, 54, 65, 67, 69	Rectum	Colon	2	3
3	54, 64, 67	Esophagus	Stomach	1	2
1	66	Liver	Stomach	0	1
3	40, 65, 67	Stomach	Rectum	1	2
1	62	Stomach	Gallbladder	1	0
1	69	Breast	Thyroid	0	1

Table 2. Survival rate of postoperation (%)

	1 year's	3 year's	5 year's	10 year's
Synchronous	100.0 (8/8)	100.0 (8/8)	62.5 (5/8)	12.5 (1/8)
Metachronous	100.0 (18/18)	50.0 (9/18)	33.3 (6/18)	0.6 (1/18)

DISCUSSION

The incidence of multiple primary carcinomas reported with a wide variety of ratio in some reports. Macdona indicated the incidence of multiple primary carcinomas make up 10.7% of the total patients with cancer in 1960; 2.3% was reported in Japan[1] in 1981; but only 0.35% to 0.52% were reported in China[2] in 1990. Our data demonstrated that the incidence of double primary carcinomas made up 0.93% of the total patients with cancer. The cause of the lower incidence in China is that of the lower autopsy rate as well as short of knowledge of diagnosis of the multiple primary carcinomas. Most of the reports were double primary lesions, triple and four primary lesions also had been reported both inside and outside the country. A case of nine primary malignant lesions was reported previously in China, and a case of six synchronous primary lesions (stomach, rectums, ascending colon, transverse colon, sigmoid colon and ileum) was fund in our hospital this year. It was reported that the pathogenic factor of multiple primary carcinomas is associated with chemotherapy or radiotherapy, the risk factor of the second primary cancer increases 3 to 30 times if the patients are given chemotherapy and/or radiotherapy. The ratio of familial disposition of multiple primary carcinomas is 29.6%.[3]

The morbidity of the multiple primary carcinomas in alimentary system is higher than that of in other systems. It was reported that the ratio of multiple primary carcinomas in alimentary system mad up 76% in 2725 cases of multiple primary carcinomas in Japan.[1] 21 of 32 cases of the double primary lesion were in digestive system (65, 6%) in our data. On the other hand, multiple primary carcinomas of colon and rectum were described in some reports. Mo Shanjing[4] indicated that 2% to 12.3% of colorectal carcinoma are multiple primary lesions and 3.8% to 7.8% of colorectal carcinoma are associated with primary lesions in other organs. Lee[5] reported that in a group of 308 cases of colorectal carcinoma, there were 12 cases of the second primary lesion in colon or rectum, and 14 cases of the second primary lesion in bladder, prostate, breast, uterus, lungs, skin and stomach respectively.

Radical resection is the most effective treatment to the patients with multiple primary carcinomas. Mo Shanjing et al.[4] demonstrated that 78% of the resection rate and 42% of the survival rate of 5 years in their data. Wang Hongzhi.[6] reported that the 5 year's survival rate of synchronous carcinomas and metachronous carcinomas were 100% and 83.3% respectively in a group of 19 cases multiple primary colorectal carcinomas. In our data, the survival rates of 1, 3, 5, of synchronous lesions were 100.0%, 100.0%, 62.5% respectively, and the metachronous

lesions were 100.0%, 50.0% and 33.3% respectively. Each of above two groups has one patient survived over 10 years. We indicated that early diagnosis and radical resection could increase the survival rate of the multiple primary carcinomas.

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