COMBINATION THERAPY OF DRUG-RESISTANT CHORIOCARCINOMA

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From Jan. 1983 to June 1990, 35 drug-resistant choriocarcinoma treated in other hospitals were referred to our hospital. Among them, 88.6% of patients had already undergone more than 5 courses of chemotherapy, and the tumour showed resistance to at least 3 anti-choriocarcinoma drugs. PBA or PVBA regimen of chemotherapy as the main treatment was combined with irradiation or surgery. The 1-, 2-, and 3-year survival rates of PBA group were 60%, while 1 and 2-year survival rates of PVBA group were 73.3% and 75% respectively. The more the varieties of resistant drugs and the more the courses of previous chemotherapy had undergone, the worse the prognosis would be. The authors believe that the PVBA chemotherapy is very effective for drug-resistant choriocarcinoma.

Key words: Combination therapy, Drug-resistant choriocarcinoma.

MATERIALS AND METHODS

Clinical Manifestations

From Jan. 1983 to Jun. 1990, 35 cases of drug-resistant trophoblastic tumour referred from other hospitals were treated in our department. (Choriocarcinoma 32 cases, invasive mole 3 cases). The diagnosis of choriocarcinoma was based on clinical signs, blood HCG, β-subunit determination and pathological examination.1 The diagnosis of resistant choriocarcinoma was based on the tumour failed to respond to many drugs. 20 cases of resistant choriocarcinoma were treated with DDP, BLM, ADM (PBA group 1983–1987). While 15 cases were treated with DDP, VP_{16} BLM, ADM
(PVBA group 1988--1990). All of the cases had the elevation of blood HCG titer and metastatic lesion.

In PBA group, lung metastases 15 cases (diameter of mass <5 cm, 8 cases, >5 cm, 7 cases) brain metastases 4 cases, kidney metastases 1 case. In PVBA group, lung metastases 15 cases (diameter of mass <5 cm, 13 cases, >5 cm, 2 cases). Pelvis 5 cases, brain 3 cases. The Patients ranged from 23--54 years in age (mean 34.7 years).

The number of resistant drugs and courses of previous chemotherapy (most of resistant drugs: 5-Fu, KSM, MTX, CTX, VCR, ADM, DDP etc.): in PBA group, mean resistant drugs 4.7 (2--6), 8.8 courses, and in PVBA group mean resistant drugs 4.5 (2--8), 7.6 courses.

### Treatment Method

Combination chemotherapy (PBA or PVBA) as main treatment was combined with surgery or irradiation.

**Combination Chemotherapy**

- PBA regimen: Cisplatin 20 mg iv drip on day 1--5; BLM 10 mg iv drip on day 1--5; ADM 40 mg iv on day 1.
- PVBA regimen: Cisplatin 20 mg iv drip on day 1--4; VP16 100 mg iv drip on day 1--4; BLM 10 mg iv drip on day 1--4; ADM 40 mg iv drip on day 1.

The courses of chemotherapy with an interval of 2--3 weeks, 6 courses were usually given.

**Irradiation and Surgery**

Radiotherapy or surgery was arranged after the courses of chemotherapy for big resistant lesions, single lesions suitable for surgery or irradiation. Radiotherapy is the first choice for multiple metastases.2

In this paper, 12 cases in PBA group and 7 cases in PVBA group were treated with irradiation, there are 3 cases in PBA and 2 cases in PVBA group treated by surgery.

### RESULTS

Disappearance of clinical symptoms, signs and lesions in the chest film with the titer of blood HCG radioimmunologic assay less than 12 ng/ml, β-HCG less than 3.1 ng/ml (successive biweekly determination for more than 5 times) were the criteria for clinical cure and this was taken as the base for statistics of survival rates.

**Survival Rates**

In PBA group (1983--1987), the 1, 2, 3-year survival rates were all 60.0% (12/20). While the 1, 2-year survival rates in PVBA group (1988--1990) were 73.3% (11/15), 75% (8/12) respectively.

The results in PVBA group were superior to that in PBA group (Table 1).

<table>
<thead>
<tr>
<th>Group</th>
<th>1-year %</th>
<th>2-year %</th>
<th>3-year %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBA</td>
<td>12/20</td>
<td>60.0</td>
<td>12/20</td>
</tr>
<tr>
<td>PVBA</td>
<td>11/15</td>
<td>73.3</td>
<td>8/12</td>
</tr>
<tr>
<td>Total</td>
<td>23/35</td>
<td>65.7</td>
<td>20/32</td>
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**Relationship between the Results of Resistant Choriocarcinoma and Courses of Previous Chemotherapy**