

b) it is reasonably accurate in the diagnosis of invasive carcinoma of the cervix, specially if one taken into account the fact that false positive results are almost always associated with some pathological changes which require further investigations;

c) in view of what was stated in b) and of the limited valute of cytology in carcinoma of the endometrium, the test may be helpful in this field;

d) it may be combined with a second diagnostic method in a « two method » screening scheme, because false negative results obtained by the TTC method usually do not coincide with false negative results obtained by other methods.

The drawbacks of the cytochemical test are as follows:

a) it is of little value in the early diagnosis of cervical cancer (51% of false negative results in carcinoma in situ);

b) the specimens cannot be preserved and it is not possible to defer their reading;

c) the test is not specific;

d) the interpretation of smears is rendered difficult by bleeding.

SUMMARY

The diagnostic accuracy of the triphenyltetrazolium chloride (TTC) cytochemical method was evaluated by comparison with cytology and colposcopy in 8.491 patients (of whom 548 had gynecological cancer). The method is based on the demonstration of lipids and oxidative enzymes in the cytoplasm of exfoliated cells. False negative results were obtained by the method in 5% of cases of invasive carcinoma and in 51% of cases of carcinoma in situ of the cervix uteri. Using material obtained by endometrial lavage, the incidence of false negative results in carcinoma of the uterine body was low (2,9%), but that of false positive results was very high (32,1%). The test was also evaluated as an exclusive method of screening in 1.610 outpatients; six cases (0,3%) of malignant neoplasms of the genital organs were detected.

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Long-term results in the chemotherapy of primary malignant tumours of the ovary

by

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In this report we discuss the long-term results obtained in the chemotherapy of primary malignant tumours of the ovary.

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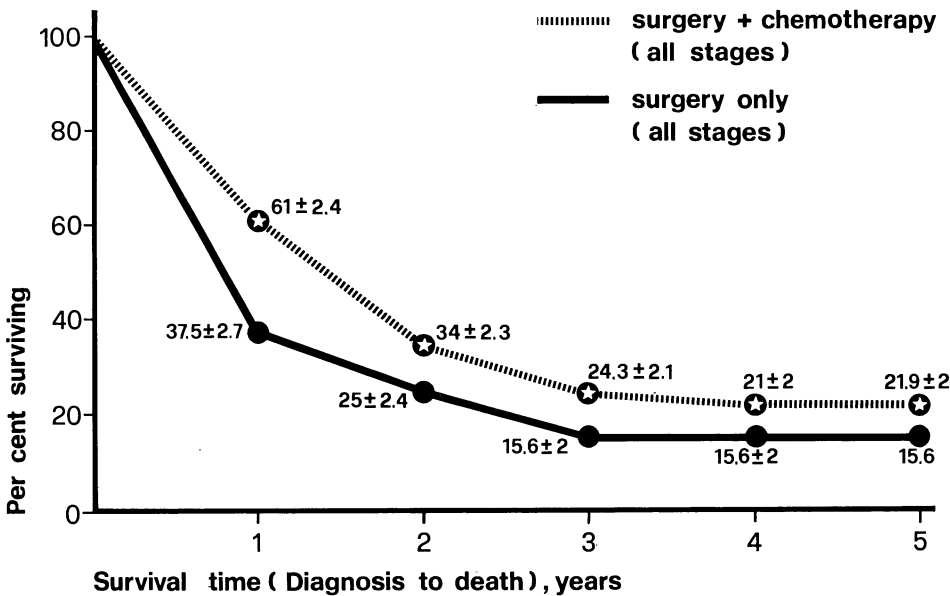


FIG. 1

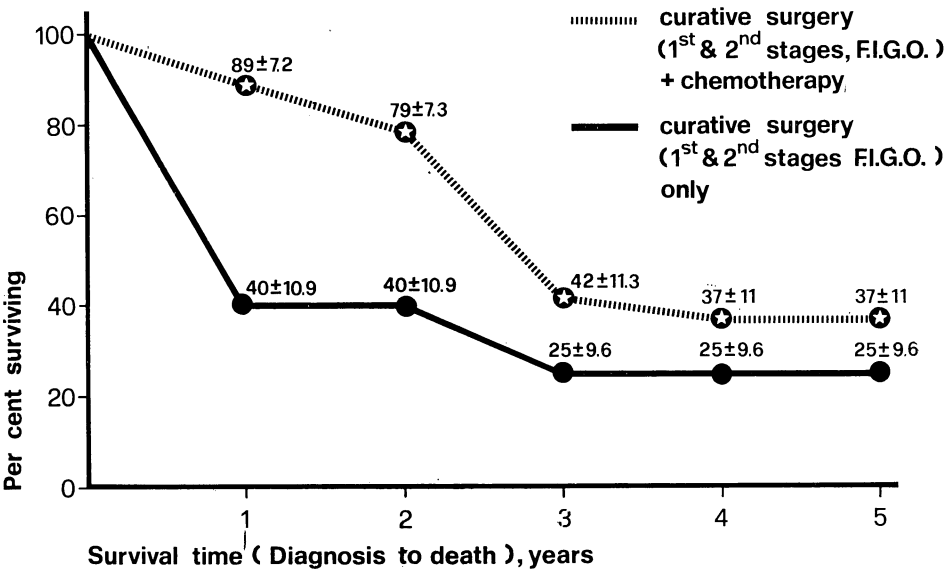


FIG. 2

Our study was based on case material from the Obstetrics and Gynaecological Clinic of the University of Padua, in Padua and Verona, and from the School of Obstetrics of Bolzano; the investigation began in 1962.

A preliminary assessment of some of this case material was presented to the National Congress in Bologna in 1968 (^{1,2}). Although the authors stated that a definitive evaluation can only be based on the criterion of survival, they found that the addition of antitlastic agents to traditional therapy led to an improvement in the subjective and objective state which was assessable in terms of « performance status » (the state of validity or quality of life).

After five years, we have found it desirable to draw up a definitive evaluation of this case material.

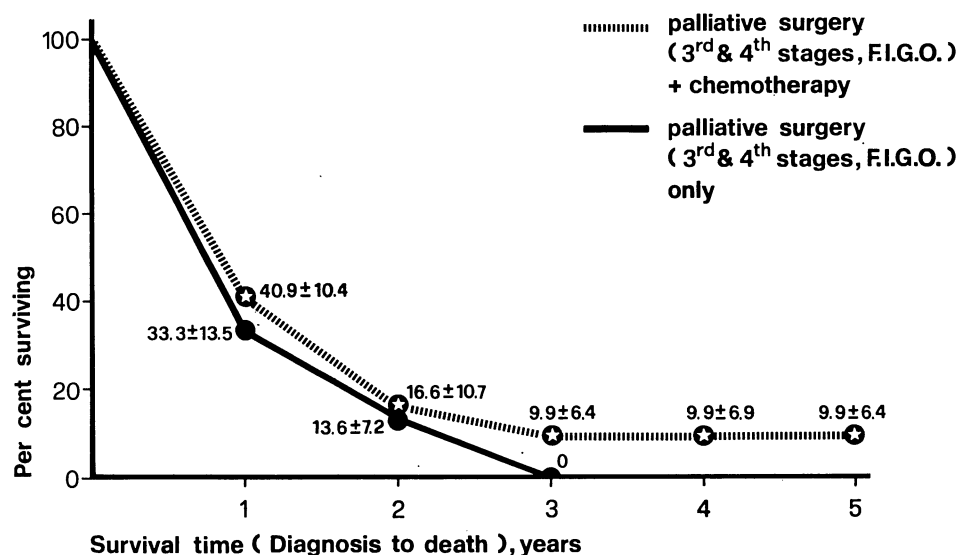


FIG. 3

MATERIALS AND METHODS

In order to make the case material as uniform as possible, we applied the following selection criteria:

- 1) the malignant nature of the neoplasia must be proven by histological findings;
- 2) we excluded all cases which had not undergone surgery in the above Institutes; the F.I.G.O. classification was adopted for the surgical condition;
- 3) each case of carcinoma had to be of proven ovarian origin;
- 4) all cases which had radiotherapy in addition to surgery and to chemotherapy were excluded;
- 5) we only considered those cases which offered the possibility of reliable follow-up after five years.

The application of these selective criteria reduced the case material from 97 to 41 cases which had undergone surgery and had been treated with antitlastic agents.

For controls to check the effectiveness of chemotherapy we used cases which had undergone surgery alone; by applying the above criteria we obtained 32 out of a total of 58 cases.

Antiblastic therapy is based predominately on the administration of alkylating substances (cyclophosphamide, triethyleniminobenzoquinone, triethylenethiophosphoramide), always associated in various forms with antifolics (amethopterin), antipurines (6-mercaptopurine) or antipyrimidins (5-fluorouracil).

RESULTS

Figure 1 shows the survival rate after five years in the two groups of patients observed, irrespective of the stage of the disease. Statistical analysis of these results showed that chemotherapy significantly improves the survival rate during the first year only (probability of error less than 5%).

Let us now look at the effects of the antiblastic agents in relation to the stage of the neoplasia. Figure 2. shows that in stages I and II (in which surgery may be used for curative purposes) the use of chemotherapy appreciably improves prognosis. Statistical analysis showed that the difference between the survival percentages is highly significant (probability of error less than 1%) during the first year, and significant (probability of error less than 5%) during the second year. The difference is no longer significant from the third year on.

Figure 3. clearly shows that in stages III and IV (in which surgery could clearly have only a palliative purpose) chemotherapy has no effect whatever on prognosis.

DISCUSSION

The above findings show that in primary malignant tumours of the ovary chemotherapy produces:

- 1) in all cases an initial improvement of the subjective and objective state, which can be assessed in terms of performance status;
- 2) in stages I and II, an appreciable increase in the survival rate for the first two years;
- 3) in stages III and IV, no appreciable increase in survival.

These findings enable us to confirm the views of Vecchietti and Onnis ^(1, 2, 3) on the need for antiblastic treatment as an essential complement to surgical intervention. It is not justified to omit chemotherapy in the initial stages and to limit it to the advanced stages.

SUMMARY

The long term results (5-years survival) obtained with the chemotherapy in 41 cases of primary malignant tumours of the ovary are presented.

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