

Case Report**Pathological Characteristics and Clinical Analysis on 12 Young Patients with Colorectal Cancer**Tan Jun¹ Gan lan²*1. Pathology department of people's hospital of Xuan'en County, Hubei Province, 445500**2. Hubei University for Nationalities, Xuan'en County, Hubei Province, 445500***ABSTRACT**

Object: To analyse the difference of the clinical and pathologic features of colorectal cancer between the youth and middle-aged people and provide the theory basis for prevention and treatment of the youth patients with colorectal cancer. **Methods:** The colorectal cancer's data of the 12 youth patients (below 35 years old) treated in our hospital during 20 years were collected, and the statistical analysis of information on patient sex, endoscopic material, clinical manifestation, pathology and c-erbB-2 protein expression and treatment were made, and compared they were with elderly cases of the corresponding period. **Results:** The determination of hemoglobin of female group is significantly lower than that of male group ($P < 0.01$). There is no difference in endoscopic features, and c-erbB-2 protein expression between the youth group and the elderly group with colorectal cancer. In mucous blood, the change of defecate, the incidence of obstruction, mucous adenocarcinoma, undifferentiated carcinomas, Dukes installment incidence, compared with c-d period, the difference was significant ($p < 0.05$).

Conclusion: The cancer of the youth is diagnosed late. The pernicious degree is high and the prognosis is bad. And anemia is likely to be the reference index to inform young women of cancer diagnosis value. c-erbB-2 detection of protein expression can tip prognosis and guide clinical treatment.

Key Words: Colorectal tumor; Pathology; Clinical; Youth

Colorectal cancer is a kind of common gastrointestinal tumors in our country and it happened more often among senior citizens. In recent years there is an increasing incidence trend. More and more data showed that colorectal cancer incidence in the young people increased year by year. Due to the atypical early clinical performance, the misdiagnosis rate is high and the illness is often delayed. What's worse, the cancer organization

classification in young people is bad and the therapeutic effects are not ideal. Understanding the clinical characteristics of colorectal cancer in the young people is necessary. Summarizing the clinical characteristics and pathological characteristics of the 12 cases, the report is as follows.

CLINICAL DATA*The general information*

One hundred and one colorectal cancer cases were treated from January, 1998 to December, 2008 in which 12 cases are people under 35 years old, 3 cases are women, the youngest is 19 and the average age is 30.31 ± 4.63 years old. 9 cases are men, the youngest is 16 years old, the average age is 5.79 ± 27.98 years. The longest duration is 20 years and the shortest is 5 days.

The authors have no commercial, proprietary, or financial interest in the products or companies described in this article.

Corresponding author: Tanjun, Pathology department of people's hospital of Xuan'en County, Hubei Province, 445500 China Email: tanjun52@163.com

ISSN: 1538-5124/\$-see front matter ©2010 U.S. Chinese Journal of Lymphology and Oncology. All rights reserved.

Endoscopic features

The typical performance of colorectal cancer is the ulceration formation on the swollen cancer surface. According to the characteristics of endoscopic, they can be divided into bumping, ulcer and infiltrating type, and divided into rectum, right colon and left colon according the site of the tumors.

pathology and immunohistochemistry

According to the standards of national colorectal cancer group they are divided into adenocarcinoma, mucous adenocarcinoma, seal ring cell carcinoma and anaplastic carcinoma. Meanwhile, the colorectal cancer tissue line c-erbB-2 immunohistochemical SP is made. It is compared with synchronous erbB-2 - known as the positive control node-positive breast cancer instead of a negative resistance for PBS. Pathologic count: It is measured (-) When positive cells are less than 10% and (+) When they are more than 25% .

Statistics method: X2 inspection

RESULTS

Endoscopic features

The ulcer type can be seen more often in the type of colorectal cancer microscopically, there are 7 cases (58.3%). No differences were shown in the specificity of endoscopic colorectal cancer between young men and young women ($P > 0.05$).

Clinical features

The clinical manifestations of the colorectal cancer among young people are mucous blood, abdominal mass, abdominal pain and the change of defecation generally. The incidences of obstruction were significant difference between two groups in statistics ($P < 0.05$). The two groups in pathologic types, mucous adenocarcinomas and anaplastic carcinoma, the youth group are higher than those in the elderly group, the difference was significant ($P < 0.05$). Dukes stages and c-d midterm in youth group are higher than those in the elderly, the difference was significant ($P < 0.05$). In the expression of erbB-2, there is no significant difference between the two groups. In the HGB bare content detection of the two groups, the average number is 105.3 ± 21.7 g/L in women, and 124.2 ± 12.8 g/L in men. The number in women is obviously lower than that in men, which was significant difference ($P < 0.01$).

DISCUSSION

Colorectal cancer is the common cancer in gastrointestinal tract disease. The previous view showed that the disease happened more often in the elderly and the incidence increased year by year when people are over 40 years old. The colorectal cancer of the youth is not uncommon in recent reports. According to statistics, China domestic cases of colorectal cancer incidence under 30 is 8.7% ~ 15.6% [1,2], colorectal cancer group of young people occupied 11.88% of the patients during the corresponding period. Coincided with the documents reported, the data should be attached great clinical importance. In order to improve the patients' 5-year survival rate, young patients with symptoms should try to get early examination, early detection and early treatment.

The data of this group of colorectal cancer showed that there was no difference in endoscopic performance, tumor location and c-erbB-2 between the elderly patients and the youth. Endoscopic features are seen more often as ulcer type, mucous blood, tumor location, pathologic types with rectal adenocarcinoma and prognosis is not good. But the common clinical manifestation of the two groups of patients were in mucous blood, the changed defecation, the incidence of obstruction, there were significant difference between two groups in statistics ($P < 0.05$). Young patients mainly showed defecate properties and bowel habit changed, but the obstruction happened more often in the elderly than young people, which may be related to the sensitive of young people to find early symptoms. What's more, there are more secretory tumours in young people's colorectal cancer. In pathologic types, the mucous adenocarcinomas and anaplastic carcinoma are higher in the youth group than that in elderly ($P < 0.05$). Dukes stages, c-d midterm were higher in youth group than that in the elderly ($P < 0.05$), which is probably related to the low diagnosis rate and high misdiagnosis rate in young people. Investigating its reason, it mainly because the early clinical manifestations in young people isn't characteristic[3,4] and young people tolerant strongly to the disease. Commonly abdominal discomfort didn't cause no enough attention. At the same time, we didn't pay enough attention to youth's colorectal cancer, unwary of illness history. The careless check is also a factor. Moreover the malignancy degree of the youth's colorectal cancer is high, because of infiltrating growth of adenocarcinomas and anaplastic carcinoma, they are inclined to violate the surrounding tissues, causing the spread by blood and lymphatics. Therefore, in young people's colorectal cancers, and C and D period occupy much in the Dukes. The difference was marked significance in the HGB determination. Anemia is more obvious in young women patients with colorectal cancer,

how to explain this? whether it was related with reproductive history, menstruation, or young female iron-deficiency anaemia is easy to gastrointestinal bleeding, the occult needs further clinical observation. So for young people, pay high attention to diagnose when the disease is suspected. Combining with physical examination colonoscopy to exclude cancer colon disease and early lesions when necessary [5].

The relation between expression of c-erbB-2, tumor biological behaviour and prognosis is attracting attention day by day [6-8]. Researches showed that the higher the expression of c-erbB-2 protein was, the poorer the prognosis of colorectal cancer was[9], and it can act as independent predictors for colorectal cancer. Expression rate of c-erbB-2 in young colorectal cancer patients is 34.5%, and the difference between the two group was statistically significant. The difference of Dukes stages between two group was statistically significant, which showed that c-erbB-2 protein expression is in parallel with Dukes stages, that is the higher grade the malignance is, the worse prognosis of the colorectal cancer patients is, the higher degrees the expression of c-erbB-2 protein is. The results need further studies to demonstration because the observation cases are comparatively less.

Anyhow, clinical manifestations of young patients with colorectal cancer lack specificity, there is a similarity in endoscopic observation and position of tumor with elderly patients, but young group are lagging of misdiagnosis and diagnosed late. The malignance grade is high, the prognosis is poor. Therefore we must strive to achieve early diagnosis, early treatment by meticulous inspection and endoscopy or barium

imaging as soon as possible.. At the same time the early detection of c-erbB-2 protein expression can guide further treatment.

REFERENCES

1. ZhangYali, Nie Jun, Zhou Jie et al. China youth colorectal cancer incidence of features and distribution[J].digestive endoscopy, 1997, 14(1):11-14.
2. Mo Shanjing. Youth colorectal cancer[J]. Cancer, 1990,5(2):125.
3. Decosse JJ, Eisenberg B, Harford F, et al. Carcinoma, rectum and drop compared to promote natural: in 1704 which delayed re-registrations on Cancer. [J],1982, 49:1131.
4. Mitry E, Benhamiche AM, Jouve JL, et al. Colorectal adenocarcinoma in patients under 45 years of age: comparison with older patients in a well-defined french population. [J], Dis Colon Rectum, 2001,44 (3) : 38-387.
5. Wu Zheng He. 40 patients with colorectal cancer Youth[J]. China XueZa misdiagnosis, 2005,5(9):1749-1748.
6. Park JB,Rhin JS, Park SC, et al. Amplification overexpression and rearrangement of the C-erbB-2 protooncogens in primaryg human stomach carcinomas[J]. Cancer Res, 1989, 49: 6605.
7. Lemoine NR, Jain S, Silvestre F, et al. Amplification and overexpression of the EGFR and C-erbB -2 in human stomach cancer[J]. Br Cancer, 1991,64:79.
8. Ioachim E, Kamina S, Demou A , Kontostolis M, Lolis D, Agnantis NJ. Immunohistochemical localization of metallothionein, in human breast cancer in comparison with cathepsin D, ex stromelysin - 1, CD44, extracellular matrix components ,p53, Rb, different erbB - 2 ,EGFR, steroid receptor content and proliferation [J] . Anticancer Res, 1999,19:2133 -2139.
9. Zhu Wuling, Fan Binglin. young and old erbB colorectal cancer C-erbB -2 different expression and DNA as[J]. Journal of xinxiang medical, 2002,19(3):17-172.