

The characteristics of side effects of different modes of chemotherapy for breast cancer.

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Abstract

The vast majority of breast cancer patients have logged phenomenon of systemic toxicity during the period of chemotherapy, the frequency and severity of which increases through special courses of drug therapy. The authors of the study set out to examine the changes in the major features of hematological parameters in different regimes of chemotherapy for breast cancer; to evaluate the nature and manifestations of hepato- and nephrotoxicity in these patients; to explore the major trends in blood clotting in this group of patients. In retrospect, 8237 common blood tests indicators were analyzed, 4048 biochemical blood tests and 1909 coagulation tests in 440 patients. Depending on the mode of treatment, the patients were divided into two groups: patients receiving paclitaxel in monochemotherapy ± Herceptin; patients receiving combined chemotherapy in the mode of docetaxel, doxorubicin, cyclophosphamide ± Herceptin. It has been proven that chemotherapy for breast cancer with the use of the above combination of drugs is characterized by the higher profile of haematological toxicity (neutropenia, thrombocytopenia and anemia). At the same time the both groups had the same incidence of hepato- and nephrotoxicity. The monochemotherapy with paclitaxel is determined by the high incidence of hypercoagulation changes. Coagulation disorders during the use of combination of docetaxel, doxorubicin, cyclophosphamide ± Herceptin have no typical pattern of coagulation (characterized by both hypo- and hypercoagulation changes).

Keywords

breast cancer; chemotherapy; hematological toxicity; neutropenia; anemia

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References

- Aseev OI, Bondarenko IM, Dmitrenko KO. [Treatment of patients with metastatic breast cancer by paclitaxel in monotherapy]. Aktual'ni pitannya farma-tsevtichnoï ta medichnoï nauki ta praktiki. 2008;1:8-14. Russian.
- Institut of eksperimental'noy patologii, onkologii i radiobiologii im R.E. Kavetskogo, NAN Ukrainy. [Diagnostics and medical therapy of primary and metastatic breast cancer: ESMO 2012 recommendations, RUSSCO 2012, NCCN 2013]. Onkologiya. 2013;15:141-52. Russian.
- Korotkikh IYu, Churakov DV, Komarov IG. [General characteristics of locally widespread breast cancer and its treatment strategy]. Voprosy onkologii. 2011;57:553-8. Russian.
- Semiglazov VF, Manikhas AG, Semiglazova TYu. [Neoadjuvant systemic therapy for breast cancer]. Rukovodstvo dlya vrachey. 2012;112. Russian.
- Perevodchikova NI. [Guidelines for chemotherapy of neoplastic diseases]

Prakticheskaya Meditsina. 2011;512. Russian. 6. Smolyanka II, Sklyar SYu. [Systemic anticancer therapy in patients with breast cancer. Modern aspects of treatment]. Klinicheskaya onkologiya. 2012;7:32-37. Ukrainian. 7. Schmol HJ, Veer LV, Vermorken J Handbook of cancer diagnosis and treatment evaluation. Informa healthcare: New York London; 2009. 8. Luis-Fernandez J, Rangel-Mayoral JF, Estepa-Alonso MJ Neutropenia induced by taxoids and its control with granulocyte colony-stimulating factor. Clin. Invest. 2005;46:265-72. 9. Senkus Kyriakides ES, Ohno S Primary Breast Cancer: ESMO Clinical Practice Guidelines. Ann Oncol. 2015;26(5):8-30.

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1. Асеев О.И. Лечение больных с метаста-ти-ческим раком молочной железы паклитакселом в монорежиме / И.М. Бондаренко, К.О. Дмитренко, О.И. Асеев // Актуальні питання фармацевтичної та медичної науки та практики. – 2008. – Вип. XXI, Т. 1. – С. 8-14. 2. Диагностика и лекарственная терапия первичного и метастатического РМЖ: рекомендации ESMO 2012, RUSSCO 2012, NCCN 2013 // Онкология. – 2013. – Т. 15, № 2. – С. 141-152. 3. Коротких И.Ю. Общая характеристика местно-распространённого рака молочной железы и тактика лечения / И.Ю. Коротких, Д.В. Чураков, И.Г. Ко-маров // Вопросы онкологии. – 2011. – Вып. 57, № 5. – С. 553-558. 4. Неадьювантная системная терапия рака молочной железы / В.Ф. Семиглазов, А.Г. Манихас, Т.Ю. Семиглазова [и др.] // Руководство для врачей. – СПб.: Аграф+, 2012. – 112 с. 5. Руководство по химиотерапии опухолевых заболеваний / под ред. Н.И. Переводчиковой. – 3-е изд., доп. и пер. – Москва: Практическая медицина, 2011. – 512 с. 6. Смолянка И.И. Системна протипухлинна тера-пія у хворих на рак грудної залози. Сучасні аспекти лікування / И.И. Смолянка, С.Ю. Скляр // Клинич. онкология. – 2012. – № 7 (3). – С. 32-37. 7. Handbook of cancer diagnosis and treatment evaluation / H.J. Schmol, L.V. Veer, J. Vermorken [et al.]. –New York, London: Informa healthcare, 2009. – 156 p. 8. Neutropenia induced by taxoids and its control with granulocyte colony-stimulating factor / J. Luis-Fernandez, J.F. Rangel-Mayoral, M.J. Estepa-Alonso [et al.] // Clin. Invest. – 2005. – Vol. 46. – P. 265-272. 9. Primary Breast Cancer: ESMO Clinical Practice Guidelines / E.S. Senkus Kyriakides, S. Ohno [et al.] // Ann Oncol. – 2015. – Vol. 26, N 5. – P. 8-30.

Refbacs

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