Bevacizumab-associated hyperlipoproteinemia type IIb in a patient with advanced invasive-ductal breast cancer

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Aim. We report a case of bevacizumab-associated hyperlipoproteinemia in a patient with advanced breast cancer. Case summary. A 57-year-old woman with advanced invasive-ductal breast cancer was administered bevacizumab from March 2008 to February 2009. Pretreatment laboratory showed borderline hypercholesterolemia (5.1 mmol/L, 197 mg/dL) and normal triglycerides (1.3 mmol/L, 115 mg/dL). Three months on treatment with bevacizumab, both serum cholesterol (11.9 mmol/L, 460 mg/dL) and triglycerides (7.4 mmol/L, 655 mg/dL) increased substantially, and remained well above the normal range for a period of bevacizumab treatment. From March 2008 to August 2008, the patient also received anticancer treatment with liposomal doxorubicin that was stopped early due to hand-foot syndrome. No concurrent hyperlipidemic drugs have been taken by the patient at the time of bevacizumab treatment. In February 2009, bevacizumab was stopped and the patient went on to receive paclitaxel for hepatic tumor progression. By December 2009, both serum triglycerides (1.3 mmol/L, 115 mg/dL) and cholesterol (3.2 mmol/L, 123 mg/dL) had normalized. Discussion. This is the first published case of bevacizumab-associated hyperlipoproteinemia. By applying the Naranjo ADR probability scales, at least a possible relationship between hyperlipoproteinemia type IIb and bevacizumab in this patient is supported by the data (Naranjo score 4). No hyperlipidemic drugs were given concurrently with bevacizumab, and the serum cholesterol and triglycerides decreased quickly after bevacizumab was discontinued. CONCLUSIONS: This study describes a case of bevacizumab-associated hyperlipidemia. Patients receiving bevacizumab should have their cholesterol and triglycerides checked for potential worsening.