

either through the lymph, or through the blood, affecting all the lymphatic system and other organs. Female patient, aged 22, without significant pathological history, is admitted in 2005 to the Hematological Clinic from Iasi for special diagnosis and therapy after the appearance of a left developing latero-cervical adenopathy. The clinical and paraclinical exams (lymph node biopsy, sternal puncture, thoracic and abdominal CT) have set the Hodgkin's lymphoma diagnosis with mixed cellularity, stage IV B and the cytostatic treatment was begun. Despite all treatment, the disease progressed rapidly – generalized adenopathies, osteolytic lesions in the lower ½ of the sternum and finally hepatorenal failure with exitus. Although the global cure rate of Hodgkin's lymphoma is about 85%, in this case diagnosing the disease in an advanced stage (because of the absence of symptoms) has determined the unfavorable evolution of the disease, with lack of response to treatment administered according to international standards and exitus in 4 years.

Late Complications Following Permanent Pacemaker Implantation

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The objective of the work was to determine prospectively the rate of late complications (6, 12 months) following first implantation of a permanent pacemaker or generator replacement. To illustrate our pathology using 3 case reports with particular problems concerning the diagnosis and treatment options. We studied 126 consecutive patients with definite indications for permanent pacemaker implantation, included between 2006 and 2009. Generator replacement was required in 12 patients because of pulse generator electrical failure. In all cases a VVI pacemaker was used. Implantation of the lead-catheter used right/left subclavian vein (108 cases vs. 18 cases) access. We realized a clinical follow-up (local pocket integrity, signs/symptoms for ipsilateral superior limb deep venous thrombosis or pulmonary thromboembolism-TEP) combined with biologic (D-dimers, fibrinogen, platelets), microbiologic (wound secretion, hemocultures) and imaging methods. Imaging follow-up protocol used venous ultrasound, ipsilateral superior limb phlebography, perfusion lung scintigram, transthoracic and transesophageal echocardiography. The overall rate of late complications was 23.8% in our study. There were infectious, thromboembolic complications and pacemaker syndrome signs/symptoms. Local pocket-related infection (pocket erosion/necrosis) with *Staphylococcus aureus/epidermidis* was found in 7.14% of cases; in two cases *Enterobacter/ Staphylococcus aureus* septicemia complicated local infection. Infective endocarditis complicated evolution in one case (vegetation on the stimulation catheter). Late infectious complications rate was significantly lower after first implantation of the permanent pacemaker comparing generator replacement (1.4% vs. 6.5%) and also in the subgroup with prophylactic antibiotherapy (0.6% vs. 3.1%). Pacing electrode thrombosis was defined by ultrasound in 10 patients (12.6%) and by phlebography in 19.04%; echocardiography detected one case of thrombosis in right atrium and manifest TEP complicated evolution. In 2 cases there were clinical signs for superior limb deep venous thrombosis. Perfusion lung scintigram revealed high /intermediate probability for TEP in 5 patients, respectively 2 patients. In 3.17% of cases both types of complications were present. Pacemaker syndrome was manifest through mild symptoms/signs in 2 cases. Our data are comparable with literature concerning the rate of late infectious and thromboembolic complications. Pacing electrode thrombosis is frequently asymptomatic and underestimated in clinical terms. For this reason, the decision for anticoagulation is better individualized. Even conducted in rigorous asepsis conditions invasive technique is better followed by antibiotherapy. The low incidence of pacemaker syndrome is in relation with follow-up period.