This study presents an analysis of the health status of 119 breast cancer survivors who were treated surgically at the Department of Surgery, 2nd Faculty of Medicine of Charles University at the Motol University Hospital, between January 1998 and January 2002, and in whom relevant clinical and follow-up data up to March 3, 2009, were available.

The aim of this study was to define a diagnostic algorithm for a latent stage of limb lymphedema, to define the most frequently occurring non-limb lymphedema, to try to re-formulate relationships between different symptoms of post-mastectomy pain syndrome and the latent stage of limb or non-limb lymphedema, and finally to verify the hypothesis that early diagnosis of lymphedema and its ready therapy may influence the subsequent development into more advanced stages.

On the basis of the proposed algorithm of diagnostics, therapy and monitoring, the patients with non-oncological conditions following a comprehensive breast cancer therapy were repeatedly examined before March 30, 2009. The main emphasis was put on case-history, clinical examination, lymphoscintigraphy and/or sonography of the venous system and the differential diagnosis of subjective and objective problems, which included acute and chronic limb lymphedema, non-limb lymphedema, WEB syndrome, neurologic disorders, post-mastectomy pain syndrome, lipohypertrophy and active cicatrix.

The results showed unambiguously that the differential diagnosis and identification of causes of individual symptoms are the basis of a successful therapy for non-oncological complications following comprehensive treatment of breast cancer. It was proved that axillary radiotherapy was associated with a considerably higher risk for not only upper extremity lymphedema, but also the development of non-limb lymphedema.