Anke Diezemann, Psychobiological alterations in anorexia and bulimia nervosa, Diss.Trier 2001

Changes in the cardiovascular system are an often described state in eating disorders.

Women with anorexia and bulimia nervosa and control persons were studied before and after a treatment in a psychosomatic clinic. Using different methods cardiovascular reactivity was evaluated in rest and during mental stress and exercise. Improvements after treatment were defined by weight gain, an increase of the trijodthyroninlevel and no more purging in the last three weeks.

The anorectics showed higher epinephrinlevels than the other women. The cardiovascular parameters demonstrated an increase of parasympathic activity and a decrease of sympathetic activity in eating disorders. However, the reactivities on stressors showed no differences in comparison to the control group. No changes were observed during the treatment apart from the heartrate, which showed a tendency to increase in the last week of therapy.

Because the improvements during the therapy were generally small, within the present study it could not be clarified wether the observed alterations are reversible. An increase of the parasympathic activity in autonome regulation of the heart in eating disorders has been demonstrated and the reactivity on stressors appears to be normal.