HHP was proposed to pasteurize ready-to-eat raw meat product (i.e. cured carpaccio). Regarding to the effect of HHP on meat texture, there are no definitive conclusions, due to the controversial results informed in previous study carried out on postrigor meat pressurized at room temperature. The aim of this study was to evaluate the effect of HHP treatment on the rheological parameters (initial stress, equilibrium stress and relaxation time) of cured beef carpaccio. Bovine Semitendinosus muscles were cured by tumbling, vacuum packed and stored at 1°C for 12 days. Then, the muscles were sliced (thickness=20mm), frozen and vacuum packed. The samples were randomly assigned into three lots, one for the control (unpressurized) and others pressurized at 400 and 600MPa for 5min at 5°C. All treatments were tested in quadruplicate. Parameters were measured using stress-relaxation technique at 3% constant strain during 1200s. The test was performed using a Stable Micro System TA-XTPlus texture analyzer in 5 cylinders (thickness=8mm) separated from slices.

One way ANOVA was used to evaluate the effect of HHP on rheological parameters, applying the model \( Y_{ijk} = \beta_0 + \beta_1 \times \text{treatment} + \beta_2 \times \text{slice} + \beta_3 \times \text{treatment} \times \text{slice} + \beta_4 \times \text{slice(cylinder)} + \epsilon_{ijk} \). The range of values obtained for initial and equilibrium stresses and relaxation time were 379.7-420.2Pa, 31.6-32.2Pa and 13.5-16.6s, respectively. It was observed non significant differences \((p<0.05)\) among samples from different treatments applied. However, in a previous study, a significant effect of HHP treatment on shear force (Kramer cell) of cured beef carpaccio was found. It appears that the effect of HHP on meat texture was observed only when higher stresses were applied.