# Effect of vertical displacement of the body, on Exercise related transient abdominal pain

**Safari bak, Mehdi** [1], **Khoshraftar yazdi, Nahid** [2], **Hakkak, Elham** [2]

1- M.A in Physical Education, Ferdowsi university of Mashhad.
2- Associate Professor,Ferdowsi University of Mashhad

**Abstract**

**Purpose:** Exercise related transient abdominal pain (ETAP) is one of the pains that some people experience in their lifetime. ETAP that often referred as Stitch, is a common and chronic pain that could weak personal performance in the exercises.

**Methodology:** Statistical Society of current study includes physical education male students of Ferdowsi University with age range of 18-25 years and BMI of 18-26 $m^2$/ kg. 26 of them volunteered to the study in two groups: 13 patients with ETAP and 13 healthy subjects. To evaluate the body vertical displacement, a marker mounted on anterior superior iliac spine, then track of the marker recorded with three video camera in Simi motion systems (Germany industry).

**Results:** the results shown that there was a significant difference between vertical displacement of two groups ($P<0.05$).

**Conclusions:** based on findings of this study, could concluded that body vertical displacement could be a risk factor of ETAP. It seems that increase of body vertical displacement affects the visceral and parietal ligament and exacerbates ETAP.

**Keywords:** Exercise related transient abdominal pain, Stitch, Vertical displacement, Running

Oral Presentation