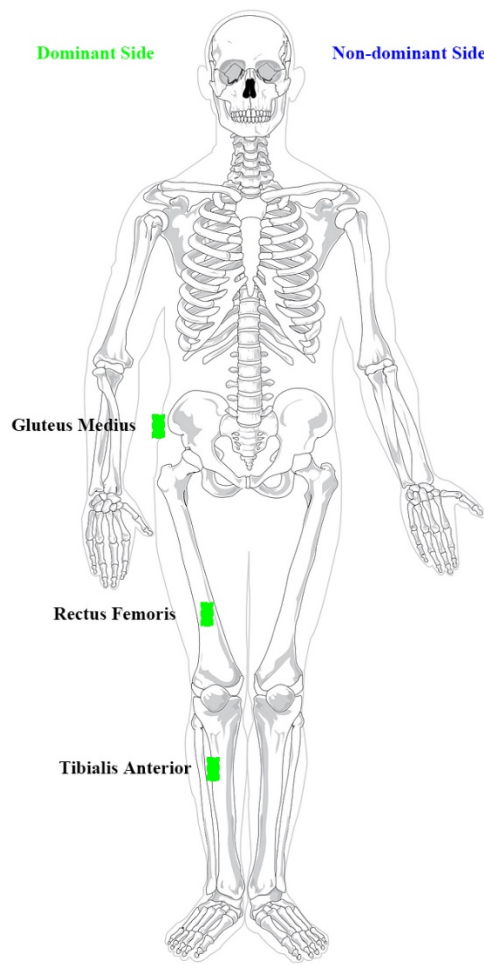
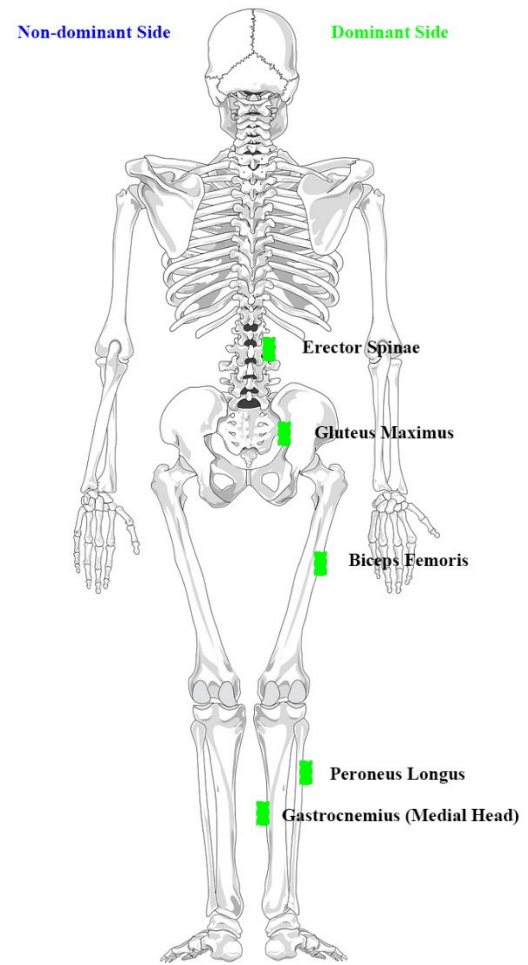
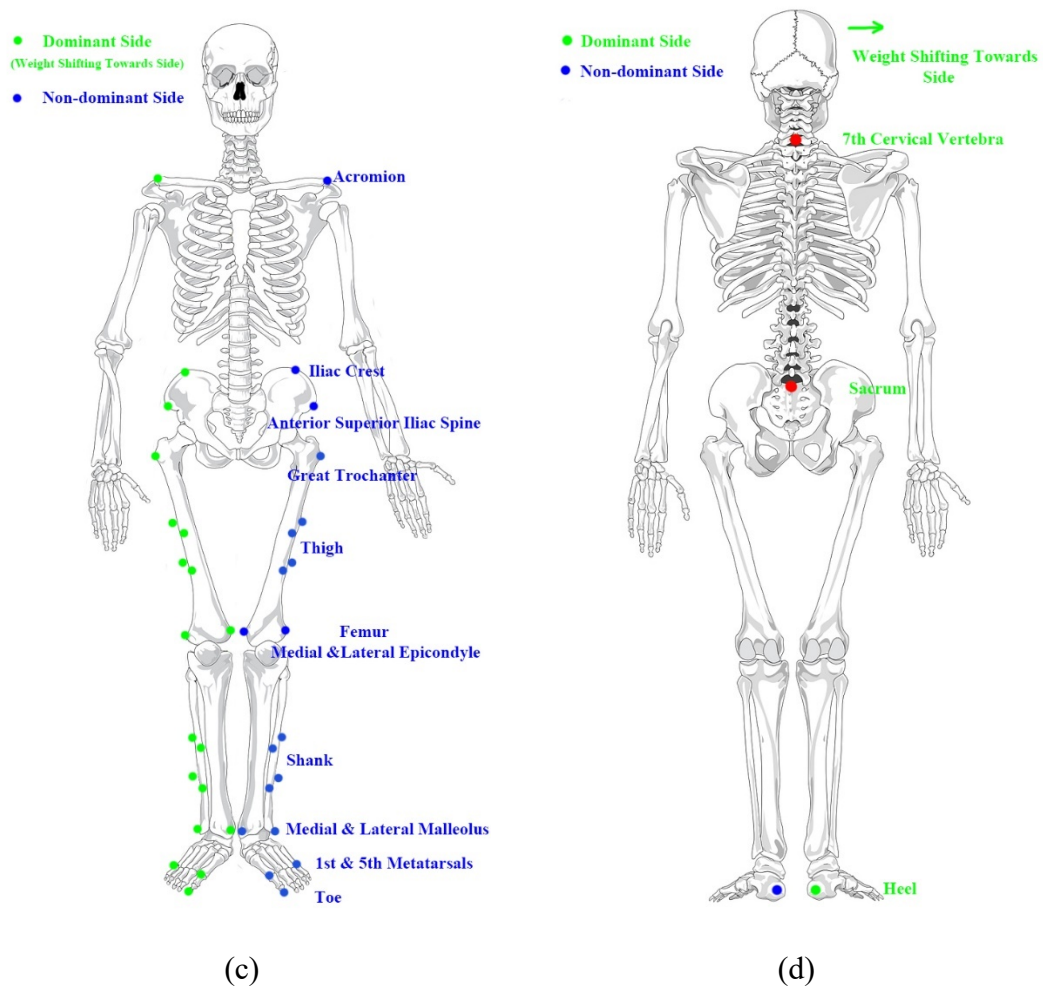




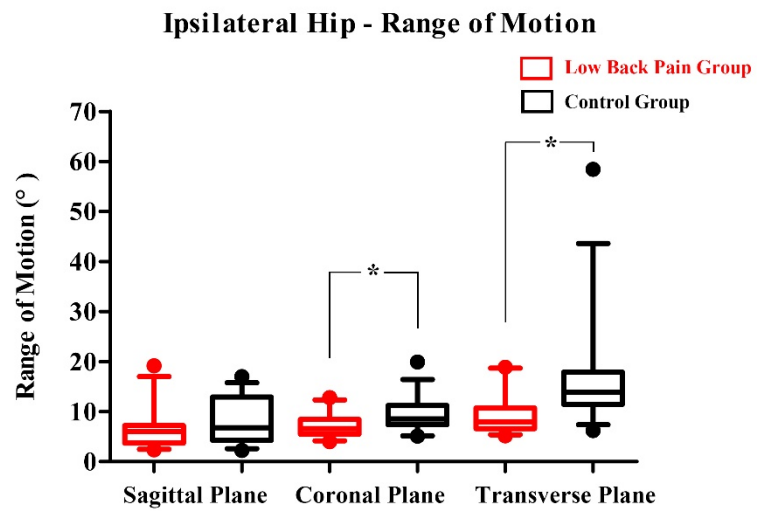
(a)



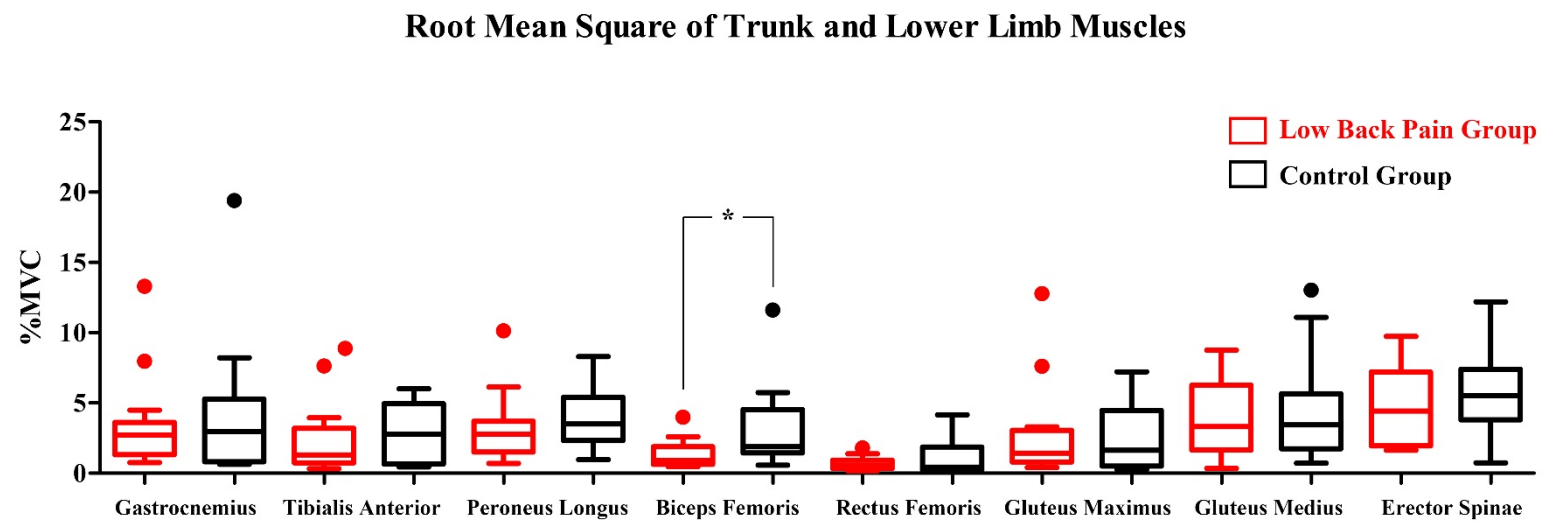
(b)



**Figure S1 Markers and surface electromyography (sEMG) electrode placement. (a) sEMG electrodes placement - front view; (b) sEMG electrodes placement - back view; (c) Markers placement - front view; (d) Markers placement - back view, green arrow points to weight shifting toward side.**



**Figure S2** Differences in the hip range of motion at ipsilateral voluntary weight shift side between the low back pain group and the control group. \* indicates  $p < 0.05$



**Figure S3** Differences in the root mean square of the trunk and lower limb muscles between the low back pain group and the control group. \* indicates  $p < 0.05$