

# “ Hip injuries in dancer athletes due to biomechanical loading. A Systematic Review”

Alexandra Migdou, Athanasios Triantafyllou, Panagiotis Gkrilias, Maria Kyriakidou, Georgios Papagiannis  
Biomechanics Laboratory, University of Peloponnese, Physiotherapy Department, Sparta, Greece

Contact: alexandramigdou@gmail.com

## INTRODUCTION & AIM

Professional dancers are susceptible to the occurrence of pathologies in their lower limbs and especially in the hip joint due to biomechanical stress<sup>[1], [5]</sup>. These injuries are the result of a variety of factors and require a specific treatment method.

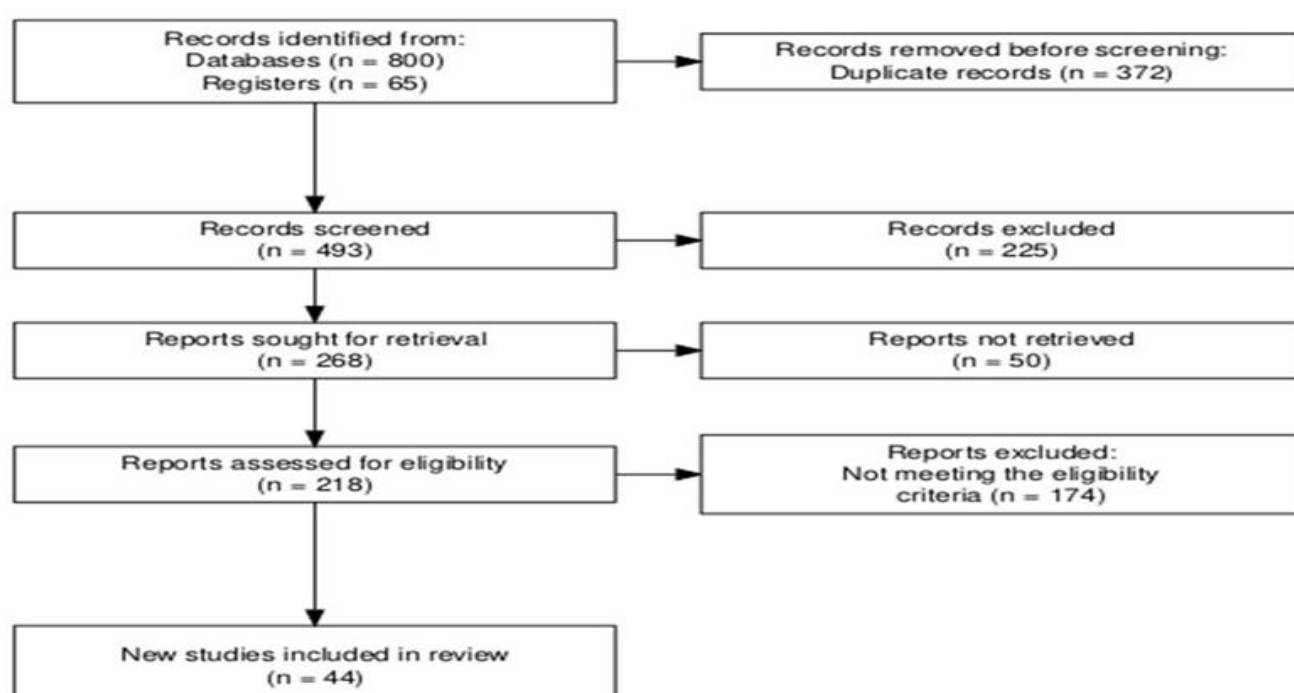
Thus, the **aim** of this review is to document these injuries, identify the factors that are responsible for them, and present the recommended treatment approaches.

## METHOD

This research was conducted by searching the PubMed, ScienceDirect and GoogleScholar databases using keywords and key phrases such as "hip disorders", "dancer's hip", and "musculoskeletal loading".

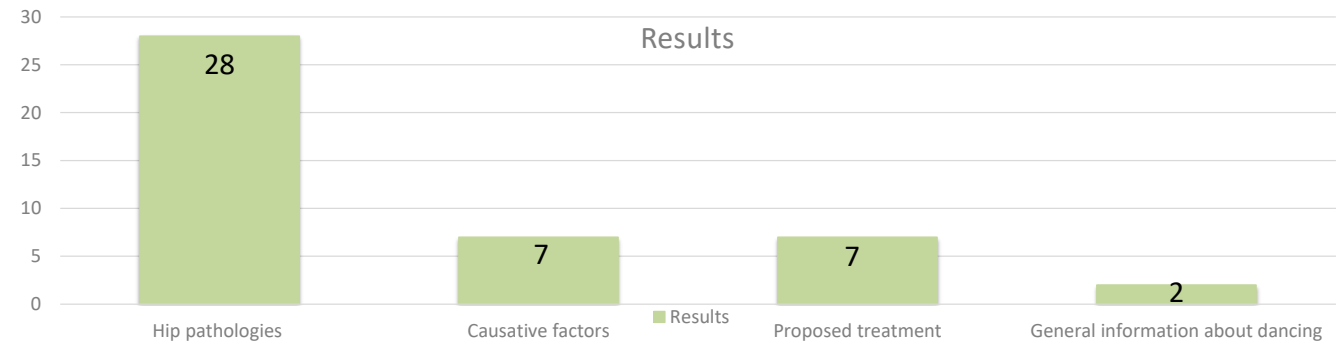
The resulting data were collected and evaluated according to the PRISMA guidelines, as it seems in the following image.

### Identification of new studies via databases and registers



## RESULTS & DISCUSSION

The total number of studies included in this review was 44.



Although dancers are quite prone to injuries, the studies conducted on this subject are limited.

Hip pathologies occupy up to 50% of cases due to i) hypertension

ii) direct impact on the joint<sup>[1]</sup>.

**Most prevalent conditions;** snapping hip syndrome, femoroacetabular impingement syndrome, acetabular labral tears, bursitis, fatigue fractures<sup>[4], [5]</sup>.

**Causative factors;** excessive range of motion of the joint and the forces it is exposed to, high training load, hyperactivity, the laxity of dancer's joints, gender, age, BMI<sup>[2], [3]</sup>.

**Treatment methods;** Conservative approach is preferred. Surgical treatment is frequently avoided<sup>[5]</sup>.

## CONCLUSION

Further research is required in order to improve the validity and reliability of the current findings.

## INDICATIVE REFERENCES

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