Retraction

Retraction: Traditional Chinese medicine orthopedic rehabilitation treatment for senile osteoarthritis based on the Big Data (J. Phys.: Conf. Ser. 1744 042127)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Traditional Chinese medicine orthopedic rehabilitation treatment for senile osteoarthritis based on the Big Data

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Abstract. Objective: To study and analyze the effect of traditional Chinese medicine orthopedic rehabilitation therapy on senile osteoarthritis from the analysis of big data. METHODS: Seventy elderly patients with osteoarthritis admitted to our hospital from March 2015 to March 2017 were enrolled. The grouping method is a random number table method, which is divided into an experimental group and a reference group, each of which is 35 cases. The patients in the reference group were treated with nimesulide orally, and the patients in the experimental group were treated with traditional Chinese medicine orthopedics. The clinical effects of the two groups were compared. RESULTS: The effective rate of treatment in the experimental group (97.14%) was significantly higher than that in the reference group (82.86%). The difference between the two groups was statistically significant (P<0.05). There were significant differences in VAS scores and JOA scores between groups, and P < 0.05. Conclusion: The treatment of senile osteoarthritis patients with traditional Chinese medicine orthopedics has achieved remarkable results. The quality of life of patients has been significantly improved, the treatment efficiency has been improved, and the pain of patients has been alleviated. It is worthy of clinical reference and further popularization.

Keywords: Senile Osteoarthritis, Traditional Chinese Medicine Orthopedic Rehabilitation Therapy, Therapeutic Effect, Big Data

1. Introduction
Osteoarthritis is one of the more common forms of chronic joint disease in the elderly. The main clinical symptoms are joint stiffness, pain and dysfunction [1-3]. Studies have shown that knee joints have the highest incidence. The main pathology of osteoarthritis is abnormal bone hyperplasia around the joint and degenerative lesions of articular cartilage. In the past, Western medicine was often used, but the ideal effect was not achieved, and adverse reactions occurred after prolonged use [4-5]. Osteoarthritis is one of the most common chronic joint diseases in the elderly. The main symptoms of the patients are joint pain, stiffness and dysfunction. Traditional western medicine treatment methods are not satisfactory, and long-term use is prone to cause more adverse reactions. On the basis of drug treatment, the combination of acupuncture, massage and other non-drug treatment methods can
significantly improve the clinical symptoms of patients and improve their quality of life and prognosis.

2. Information and methods

(1) General information. Seventy patients with senile osteoarthritis admitted to our hospital from March 2015 to March 2017 were selected as research subjects. According to the random number table method, they were divided into two groups, an experimental group (n=35) and a reference group (n=35). Among the experimental group, there were 17 male patients and 18 female patients. The minimum age was 60 years, the maximum age was 73 years, and the average age was (68.37±3.57) years old. Among the reference group, there were 21 male patients and 14 female patients. The minimum age was 61 years, the maximum age was 75 years, and the average age was (68.67±3.82) years old. The clinical data of the two groups, such as gender and age, were compared and calculated as P>0.05. There was no statistical difference.

(2) Method. The patients in the reference group were treated with nimesulide, and the patients in the experimental group were treated with comprehensive rehabilitation of traditional Chinese medicine orthopedics, including: manual manipulation, the patient's humerus pressing, quadriceps, and knee stretching, etc. 1 time; Chinese medicine fumigation, after the manipulation, the patient is treated with traditional Chinese medicine fumigation, the prescription is Sumu 20g, Chuanxiong 10g, Stretching grass 20g, Haitongpi 25g, Shengchuanwu 10g, Fugu grass 25g, Welling 20g, the above drugs are put into 1L water for boiling, after boiling, the patient's affected area is fumigated twice a day; Chinese medicine is taken orally, according to the classification of the patient's condition according to Chinese medicine, with Liuwei Dihuang Wan, Angelica 4 The soup is treated with the soup and the body pain and the soup.

(3) Judging indicators. The treatment efficiency, VAS score and JOA score of 70 elderly patients with osteoarthritis were observed and recorded.

(4) Statistical analysis. All data of 70 elderly patients with osteoarthritis were statistically analyzed by SPSS 17.0 software. The VAS score and JOA score of the two groups were expressed as (±s), t test; the effective rate of treatment in the two groups Expressed in the form of (%) rate, the line side test. The data between groups showed P<0.05, which was statistically significant.

3. Results

(1) Compare the treatment effectiveness of the two groups of patients. The effective rate of treatment in the reference group was significantly lower than that in the experimental group, and the data between groups showed P<0.05. See Table 1 for details.

| Group                  | Significant effect (example) | Effective (example) | Invalid (example) | Treatment efficiency (%) |
|------------------------|-----------------------------|---------------------|-------------------|--------------------------|
| Experimental group     | 20                          | 14                  | 1                 | 97.14                    |
| (n=35)                 |                             |                     |                   |                          |
| Reference group        | 18                          | 11                  | 6                 | 82.86                    |
| (n=35)                 |                             |                     |                   |                          |
| $x^2$                  | -                           | -                   | -                 | 3.9683                   |
| $p$                    | -                           | -                   | -                 | <0.05                    |

(2) The VAS score and JOA score of the two groups of patients were compared after treatment. There was significant difference between the two groups in the comparison between the two groups, and P<0.05. See Table 2 for details.

| Group                  | VAS score | JOA score |
|------------------------|-----------|-----------|
| Experimental group (n=35) | 2.3±0.9   | 91.5±15.6 |
| Reference group (n=35)   | 3.5±1.9   | 84.6±12.8 |
| $t$                     | 3.3767    | 2.0229    |
| $p$                     | <0.05     | <0.05     |
4. Discussion
Older osteoarthritis has a relatively complicated pathogenesis, mainly characterized by endocrine disorders, internal physiology of the body, genetic factors and abnormal metabolism of articular cartilage. In the past, the main treatment methods were mainly analgesic drugs, and long-term use would cause adverse reactions and reduce sensitivity to drugs. Chinese medicine believes that senile osteoarthritis belongs to the category of "bone sputum", mainly for the long-term blood stasis of the body, accompanied by wind, cold and dampness, etc., which in turn causes damage to the bones and bones, and the liver and kidney are relatively virtual, eventually resulting in lesions [4]. The use of traditional Chinese medicine orthopedic rehabilitation for the treatment of senile osteoarthritis can improve the blood circulation of the lesions, reduce the adhesion of surrounding tissues, help repair the damage, and also play the role of warming blood circulation, swelling and relieving pain.

The study of this group showed that the effective rate of treatment in the experimental group was significantly higher than that in the reference group. The data between the groups were statistically different, and P<0.05. The VAS score and JOA score were compared between the two groups. Obviously, statistical significance exists (P < 0.05).

In summary, the treatment of senile osteoarthritis patients with traditional Chinese medicine orthopedics has significantly improved the quality of life of patients, improved the efficiency of treatment, relieved the pain of patients, and is worthy of clinical reference and further popularization.

References
[1] Yan A, Zhang K, Qin W K, et al. Clinical effects of rehabilitation exercise in the treatment of knee osteoarthritis based on the theory of “treating muscle for bone”[J]. China Journal of Orthopaedics & Traumatology, 2017, 30(8):731.
[2] Kun H U, Lin M, Liu J, et al. Progress on Tai Chi Therapy for Patients with Senile Knee Osteoarthritis[J]. Rehabilitation Medicine, 2017, 27(2):59.
[3] Huang X, Tang J, Yan L I, et al. Effectiveness of integrated rehabilitation approach and orthopaedic treatment on functional recovery after total knee arthroplasty[J]. Chinese Journal of Rehabilitation Medicine, 2016.
[4] Guo J J, Wu K, Guan H, et al. Three-Year Follow-up of Conservative Treatments of Shoulder Osteoarthritis in Older Patients[J]. Orthopedics, 2016, 39(4):e634.
[5] Huang P C, Liu K C, Hsieh C Y, et al. Human motion identification for rehabilitation exercise assessment of knee osteoarthritis[C]// International Conference on Applied System Innovation. 2017.