## SUMMERIES & CONCLUSION

## **SUMMARY and CONCLUSION**

The aim of this work was to evaluate the role of acupuncture on pain relief and its effect on modifying the daily living activities in OA patients and to determine any possible mechanism of action for this type of alternative therapy.

Forty OA patients were included in this study; they were diagnosed according to the American College of Rheumatology Criteria for Osteoarthritis of the knee.

The patients were randomly classified into thirty patients assigned to acupuncture treatment based on the Traditional Chinese Medicine and ten patients assigned to conventional therapy (control group).

All patients underwent a standardized baseline assessment using the knee pain scale, WOMAC scale, and measurement of morning serum cortisol levels and computed tomography. Assessment was done before and 8 weeks after a course of treatment.

The findings of this work as regards control group were as follows:

1. There was insignificant difference (P>0.05) from baseline to end of treatment as regards KPS and its subscales, i.e. transfer frequency subscale, ambulation/climbing frequency

subscale, transfer intensity subscale and ambulation/climbing intensity subscale.

- There was insignificant difference (P>0.05) from baseline to end of treatment as regards WOMAC and its subscales, i.e. WOMAC pain, stiffness and disability subscales.
- 3. There was insignificant difference (P>0.05) from baseline to end of treatment as regards serum cortisol levels.
- 4. There was no correlation between serum cortisol levels and both KPS and WOMAC scales and their subscales.

## The findings of this work as regards acupuncture group were as follow:

1. There was a significant difference (P<0.01) from the baseline to the end of treatment as regards KPS and its subscales, i.e. transfer frequency subscale, ambulation/climbing frequency subscale, transfer intensity subscale and ambulation/climbing intensity subscale.

Also, at the end of treatment, there was a significant difference (P<0.01) between acupuncture group and the control group as regards KPS and its subscale.

 There was a significant difference (P<0.01) from baseline to end of treatment as regards WOMAC and its subscales, i.e. WOMAC pain, stiffness and disability subscales. Also, at the end of treatment, there was a significant difference (P<0.01) between acupuncture group and the control group as regards WOMAC scale and its subscales.

3. There was a significant difference (P<0.01) from baseline to end of treatment as regards serum cortisol levels.

Also, at the end of treatment, there was a significant difference (P<0.01) between acupuncture group and the control group as regards serum cortisol levels.

- 4. There was a negative significant correlation between serum cortisol levels and both KPS and WOMAC scales and their subscales.
- 5. Follow-up examination using CT revealed a good appreciable reduction of the amount of knee effusion.

Multidimensional assessment during acupuncture treatment included not only KPS and WOMAC scales but also measurement of morning serum cortisol level which correlate significantly with both KPS and WOMAC scales.

From our study, we can conclude that acupuncture is an effective and safe adjunctive therapy for patients with OA of the knee and that it may have an anti-inflammatory effect, as manifested by increased serum cortisol level and decreased knee effusion, besides its known analgesic effect.