mechanisms, but also at the level of the nociceptor and the spinal cord. However, the neurobiological basis of these effects has rarely been investigated even though the accumulating knowledge of the pathophysiology of chronic pain syndromes allows for specific hypotheses.

Quantitative sensory testing (QST) is a comprehensive test protocol for clinical trials evaluating patterns of sensory loss (small and large nerve fiber functions) and gain (hyperalgesia, allodynia, hyperpathia) in cutaneous and deep pain sensitivity [2]. Chronification of pain is assumed to be associated with the development of hyperalgesia and allodynia. Since naturopathic reflex therapies have been shown to reduce symptoms of chronic pain and often utilize intense manipulation of the environment of the nociceptor (e.g. Gua Sha massage or cupping), it can be hypothesized that they unfold part of their effect at the level of the nociceptor and the spinal cord. Therefore, subtests of the QST such as the mechanical detection threshold (von Frey filaments) and the pressure pain threshold (algometer) were modified and the protocols adjusted, in order to utilize these measures as outcome measures for RCTs on naturopathic reflex therapies.

First results on Gua Sha massage and other treatments typically revealed an increase in thresholds together with a pain reduction in subjective measures of pain. The paper will focus on the neurobiological background and rationale of the recommended procedures and protocols, using examples from data of our first studies introducing these methods for CAM research.

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Research Methology

PO-033

The scientific validation of Unani Eye drop on conjunctivitis

A. Latif[a], A. Razique[a], R. Sukul[b]

[a]*Aligarh Muslim University, Department of Ilmul Advia (Unani Pharmacology & Pharmaceutical Sciences), Aligarh, India*

[b]*Aligarh Muslim University, Department of Ophthalmology, Aligarh, India*

Material and methods: The scientific validation of Unani Eye drop on conjunctivitis is comprises of physico-chemical, experimental studies on animals, safety evaluations and clinical trials on conjunctivitis.

The formulation of eye drop consists of the following ingredients:

- stem wood of *Berberis aristata* DC.14.0%
- seed of *Cassia absus* Linn. 2.0%
- rhizome of *Coptis teeta* Wall. 2.4%
- bark of *Symplocos racemosa* Roxb. 2.4%
- flower of *Azadirachta indica* A. Juss. 2.8%
- Alum, $K_2SO_4 \cdot Al_2(SO_4)_3 \cdot 24H_2O$ 0.4%
- aqua distillate of *Rosa damascena* Mill.Q.S.
- Phenyl ethyl alcohol (Preservative) 0.5%.

Results:

- In physico-chemical studies the mean percentage of pH values 3.13 ± 0.012.
- The refractive index 1.360 ± 0.0008 at 24 °C. The viscosity 0.33165 ± 0.00216.
- The specific gravity 1.0075 ± 0.0006 at 25 °C. The qualitative phytochemical of eye drop gave positive test for alkaloids, sugars, saponin and sterols/terpenes.
- TLC of the eye drop in Butanol: Acetic acid: water: Ethyl acetate: the R_f values of eye drop formulation was calculated as 0.04, 0.08, 0.16, 0.26, 0.36 and 0.36.

In vitro antimicrobial activity of eye drop and standard drug in the dose and standard (*Berberine*) was carried out using different organic solvent systems of 10 μl/disc against *Escherichia coli*, *Staphylococcusaureus*, *Streptococcusmutans* and *Klebsiella*, showed significant results.

The test drug was also tested for antihistaminic activity on isolated guinea pig ileum. It was antagonized the effect of histamine on the tissue. Anti-inflammatory activity of test drug was observed in turpentine liniment-induced ocular inflammation in rabbit's eye. In anti-inflammatory activity, the signs and symptoms of ocular inflammation was subsided on tenth day in control group, whereas in test group the signs and symptoms subsided within 7 days.

In the safety evaluation, no adverse effects were observed in ocular structure in rabbit's eye: cornea, iris and conjunctiva were normal.

The clinical study was carried out on 60 patients of diagnosed conjunctivitis. The total therapeutic response of test drug (eye drop formulation) was shown as 93.3% in allergic, 90% in mucopurulent and 100% in viral conjunctivitis as compared with control group. In allergic conjunctivitis 66.7% cases cured, 20% cases relieved and 6.7% cases partially relieved and no response was observed 6.7% cases. *Conclusions:* Thus eye drop have triple action as an anti-inflammatory, antimicrobial and anti-allergic and is safe and effective in the treatment of conjunctivitis.

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