Researchers from the First People's Hospital of Lanzhou find scalp and body style acupuncture effective for the treatment of ophthalmoplegia (eye muscle paralysis). The three arm study compared standalone supplement therapy, standalone acupuncture therapy, and a combination of acupuncture plus supplements in a comprehensive treatment protocol. The greatest positive patient outcome rate was recorded in the acupuncture plus supplements group (95.16%). The least effective therapy of the three approaches to care was the use of standalone supplement therapy (58.06%).

Ophthalmoplegia, also known as extraocular muscle palsy, is a common ophthalmic disease caused by damage to the cranial nerves, which control extraocular muscle function. Major presentations of the condition are strabismus (an eye alignment abnormality), diplopia (double vision), and ptosis (drooping of the eyelid). This can happen due to cerebrovascular disease, inflammation, trauma, tumors, or diabetes (Li et al.).

According to the Huangdi Neijing, the head is crucial to the health of the eyes. Furthermore, the Ling Shu (chapter 80, Da Huo Lun) states that the qi of all the internal organs travels to the eyes and promote their health. Therefore, in treating diseases of the eyes, it is considered important to treat both local acupoints on the head and distal bodily acupoints.

Scalp acupuncture is based on traditional acupuncture theory combined with modern brain anatomy studies. The scalp is divided into zones, which influence various areas or systems of the body. Points are selected according to their position and function. For example, MHN14 (Yiming) is located in the zone
that occupies the central 1/3 of the skull. It is commonly used in the treatment of ophthalmic diseases. GB12 (Wangu) is located in the zone at the anterior 1/3 of the skull. It is used to regulate the vertebral and basilar arteries. These supply blood to the brain, and insufficient blood circulation in these arteries may result in eye dysfunction.

For this study, 186 patients with ophthalmoplegia were selected. They were randomly assigned to three groups of equal size: acupuncture only, supplements only, and acupuncture plus supplements. The scalp acupuncture areas treated in the study included the zones at the anterior 1/3 of the skull, the central 1/3 of the skull, frontal, parietal (anterior 1/3), and parieto-occipital (lower 1/3) zones.

Scalp acupuncture was performed with patients in a seated position. Following disinfection, 0.30mm x 40mm filiform needles were inserted in rows. Needle direction was pointed toward the eye of the same side (the anterior 1/3 of the skull), and toward the eye of the opposite side (central 1/3 of the skull). For the frontal and parieto-occipital zones, the needles were inserted from top to bottom and for the parietal zone they were inserted from front (anterior) to back (posterior).

Needles were manipulated with a slight pulling and pushing reducing (xie) technique. Manipulation was applied to each treatment area for two minutes so that the needle sensation was transmitted toward the eyes or forehead. The needles were retained for a total of 30 minutes with further manipulation after the first 15 minutes. During the treatment, patients were asked to move their eyeballs up and down and from left to right. Treatments were administered once per day. Ten treatments constituted one course of therapy and each patient received a total of three full courses of acupuncture therapy. The primary points selected for body acupuncture were:

- MHN9 (Taiyang)
- ST2 (Sibai)
- TB23 (Sizhukong)
- BL2 (Zanzhu)
- GB1 (Tongziliao)
- LI4 (Hegu)
- ST36 (Zusanli)
- SP6 (Sanyinjiao)
- CV12 (Zhongwan)
- ST40 (Fenglong)
- GB37 (Guangming)
- LV3 (Taichong)
• KD6 (Zhaohai)
• GB43 (Xiaxi)

Acupoints GB14 (Yangbai) and MHN6 (Yuyao) were added for ptosis. Body acupuncture was administered with patients in a supine position, following scalp acupuncture. The first group of points were Taiyang, Sizhukong, and Zanzhu or Taiyang, Tongziliao, and Zanzhu. A 0.30mm x 40mm filiform needle was inserted to a maximum depth of 15mm and was manipulated using pulling, pushing, and rotating methods based on reducing (xie) techniques. Needle sensation was transmitted to the upper eyelids or eyeballs.

Subsequently, Hegu and Sanyinjiao were needled using reinforcing (bu) and reducing (xie) techniques (based on the tonifying-dispersing method). Zusanli and Fenglong were needled using rotating, reinforcing, and reducing methods. For all other points, needles were inserted with mild reinforcing and attenuating techniques (based on the rotating method). Needles were retained for 30 minutes in total. Finally, Zhongwan was needled with mild reinforcing and attenuating techniques (based on respiratory reinforcing and reducing methods), without needle retention. Treatment was administered once per day, with ten treatments making up one course. Each patient received a total of three full courses of acupuncture therapy.

The supplement regimen consisted of mecobalamin (0.5mg injection of vitamin B12), methionine (4ml intramuscular injection), and a safflower extraction (30–40ml intravenous infusion). Treatment was administered daily with ten treatments making up one course. A total of two courses of treatment were administered. The treatment effectiveness was evaluated and categorized as follows:

• **Full recovery:** ocular muscle motor function restored, eyeballs able to move around normally, strabismus and diplopia resolved, palpebral fissure (the opening between the eyelids) restored.
• **Significantly effective:** ocular muscle motor function restored, eyeballs able to move around normally, strabismus resolved, and palpebral fissure nearly restored.
• **Effective:** ocular muscle motor function somewhat restored, motor function of eyeballs slightly improved, strabismus and diplopia improved by varying degrees. As compared to before treatment, palpebral fissure was enlarged.
• **Ineffective:** no changes in motor function of the eyeball, strabismus, diplopia or palpebral fissure.

The results indicate that acupuncture is safe and effective for the treatment of ophthalmoplegia. The addition of supplement therapy to acupuncture increases the positive patient outcome rate significantly. Based on the findings, additional research is warranted.
References
