Introduction
Peripheral facial nerve paralysis (FNP) is the most common peripheral damage of the cranial nerves. About 75% of FNP is of primary cause and 25% is of secondary cause. The most common causes of secondary FNP are either systemic or local infections, immunological disorders, tumours, diabetes, trauma, surgeries or drugs. Patients with FNP are known to show improvement up to one year after the incidence. Incomplete facial nerve palsy has a better prognosis for recovery than complete palsy (94% versus 70%, respectively), and younger patients show better recovery than older ones. Major improvement occurs without treatment during the first three weeks, after the onset of the symptoms. If no signs of recovery occur within the first three weeks, the likelihood of improvement during the next three months is very low. After six months, it becomes clear whether or not the damage caused by FNP will persist and cause moderate or severe complications. Patients who suffer from incomplete recovery, experience functional deficits which affect face expressions and, therefore, clearly impair their quality of life. Hence, it is important to improve the therapeutic outcome to decrease the incidence of sequelae following FNP.

Medical options for the treatment of complications caused by FNP are often limited to invasive methods, such as Botulinum toxin A injections or surgical reconstruction. Despite the effectiveness of facial massage and exercises in improving microcirculation and muscle function while preventing permanent contractions and muscle atrophy, patients with FNP seldom receive physical therapy. Many of them are advised to administer no specific treatment since their facial movement would return without intervention. Patients who did not find help in academic medicine often try to find relief in the alternative field.

Acupuncture is known as a safe treatment for FNP. It was found that the effect of acupuncture treatment depends on the stimulation intensity, in which stronger stimulations result in better therapeutic effects. Biopuncture can be used for a stronger stimulation of acupuncture points. It is a subcutaneous injection technique during which a homeopathic remedy is injected locally, directly into the acupuncture or trigger points. This technique can markedly intensify the effect of acupuncture treatment. The intensification of the treatment effect is caused by the prolonged stimulation of acupuncture points, which is combined with the targeted effect of a homeopathic remedy through its deposition in the injection sites.

The pathomechanism of cell metabolism in FNP patients shows a breakdown of microcirculation, leading to hypoxia and acidosis in the cells. Therefore, the selection of homeopathic remedies should be aimed at normalizing the cell metabolism and improving microcirculation. Ubichinon compositum and placenta suis injel can be used for this purpose. Ubichinon compositum and placenta suis injel are complex homeopathic remedies produced by the German company, HEEL, according to the specifications of the homeopathic pharmacopoeia. Ubichinon compositum is a critical catalyst for the mitochondrial respiration chain and provides energy for the cellular functions, whereas placenta suis has a revitalizing effect and stimulates peripheral microcirculation. This paper reports a case of a combination of biopuncture and acupuncture in secondary facial nerve palsy.

Abstract
Secondary peripheral facial nerve paralysis is a rather common neurological condition. Despite a high spontaneous recovery rate, patients will very likely develop moderate or severe complications, if no major improvement was made during the first three weeks after the onset of symptoms. This paper reports a case of a combination of biopuncture and acupuncture in secondary facial nerve palsy.

Case report
In the present study, the successful treatment of a 42-year-old woman is described. The patient had suffered from severe facial dysfunction and was referred to an acupuncture practice five months after the onset of facial palsy. Considerable improvements were achieved after ten sessions of biopuncture, combined with acupuncture and massage.

Conclusion
Biopuncture was used to increase the intensity of acupuncture on points which were stimulated on the affected side of the face.

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Case report

In the present report, a case is presented concerning a 42-year-old woman with partial post traumatic FNP on the left side of her face. FNP was accompanied by unilateral temporomandibular joint luxation, caused by a bike accident five months before her referral to an acupuncture practice. The patient was diagnosed with partial FNP by a neurologist and no medications were prescribed. Three weeks after the accident, the patient received laser therapy by her GP. The treatment was given three times a week, 15 sessions in total with some positive effect. However, severe facial dysfunction remained.

An informed consent was obtained from the patient before the biopuncture treatment, allowing the publication of her pictures. In order to evaluate the effects, pictures were taken before, during, and after the treatment, and the facial disability index (FDI) was assessed. FDI is a reliable disease-specific self-report questionnaire which helps in evaluating the disability of patients with FNP. The patient’s FDI was 0.49 before she started the treatment.

During the first therapy session, a taping technique (Figure 1) aimed at restoring the symmetry of the face was applied and customized facial exercises were shown and explained to the patient. The exercises were targeted at the lower face and included smiling with the mouth opened or closed, inflating the cheeks, alternately moving air from one cheek to the other one, drawing down the corners of the mouth while the mouth is closed, drawing the cheeks in when the mouth is closed, rising the mouth trying not to pour out the water which was held in the mouth, blowing out a lighted candle, and whistling. One to two hours of taping twice a day, and 10 minutes of exercises two to three times a day were recommended.

Each session started with five minutes of facial massage, followed by biopuncture and classic acupuncture. The skin was cleaned with 70% alcohol, and 1 ml of placenta suis injected together with 1 ml of ubichinon and 1 ml of placenta suis in a 3-4 mm, and 0.05–0.1 ml of the content of the syringe was injected in the acupoints of the affected area (G.B.-2, T.B.-21, S.I.-18, S.I.-19, ST-7, ST-6, ST-5, ST-4, L.I.-19, and Ren-24), G.B.-20 and paravertebral in the neck using 2 ml syringe and intradermal needle 30G x 13. The depth of the injections was 3–4 mm, and 0.05–0.1 ml of the content of the syringe was injected in each point.

Then acupuncture needles (0.25 x 30 mm) were inserted in the acupuncture point Du-24, and in the distal points T.B.-5, L.I.-4, LIV-3, G.B.-34. The duration of each acupuncture treatment was 20 minutes; the entire treatment session lasted for about one hour. The first five sessions were given twice a week, the following five sessions took place once a week. After 10 sessions, a considerable treatment effect was achieved (Figure 2) and the patient stated to be satisfied with the results (FDI 0.65).

Discussion

FNP is the most common type of damage to the peripheral cranial nerves. Due to a high spontaneous recovery rate, the necessity of early treatment appears needless to many orthodox medical practitioners. About 30% of the patients develop sequelae, more than half of which are severe.

Alternative approaches may be useful for improving the condition of the patients in this group. Acupuncture is known to be an effective and safe treatment for facial palsy, whereas treatment effects depend on the stimulation intensity. Injections of homeopathic remedies into acupuncture points allow target-oriented treatment, precisely applied to the affected area of tissue, and produce double stimulation: mechanical puncture and a pharmacological effect of the injected solution. The adverse effects of homeopathic injections are minimal and include:

- Local swelling and/or redness (> 90% of reports)
- Local pain (about 8% of reports)
- Allergic reactions (about 2% of reports)
- Nausea (< 0.1% of reports)
- Abdominal pain/colic (< 0.1% of reports)

Conclusion

Biopuncture can complement acupuncture treatment in patients with sequelae of facial palsy. The attention of physicians should be drawn to the benefits of this method for patients, who do not show signs of spontaneous recovery within the first three weeks after the onset of the symptoms and who will very likely develop moderate or severe complications in the future.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Abbreviations list

FDI: facial disability index; FNP: facial nerve paralysis

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References


Figure 2: Patient before treatment, and after three and ten sessions.