Chapter Outline

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Key Terms

Clay: A variable group of fine-grained natural materials that is usually ‘plastic’ when moist and are mainly mineral in composition.

Emulsion: A mixture of two or more liquids in which one is present as microscopic droplets distributed throughout the other.

Fango: ‘Fango’, the Italian word for mud, is used loosely to describe products including mud, peat, and clay.

Moor Mud: A low-moor peat from the Neydharting Moor in Austria that is well known for its anti-inflammatory effects. It is regularly mined and shipped to the USA for spa treatments.

Mud: Soft wet earth that is mainly mineral in composition (derived from rock) with some percentage of organic matter (matter derived from plant breakdown).

Peat: Partially carbonized organic tissue formed by decomposition in water of various plants but mainly mosses of the genus Sphagnum.

Sphagnum: A genus of mosses that grow only in wet acid areas where their remains are compacted over time (sometimes with other plants) to form peat.

Sulfur: A chemical element that is an important constituent of many proteins and is often found in thermal pools and in some therapeutic muds. Sulfur is believed to reduce oxidative stress on the body and is used to treat arthritis, sore muscles, skin diseases and other conditions.
FANGO APPLICATIONS FOR MUSCULOSKELETAL INJURY AND DISORDER

Acute Conditions
Sub-Acute Conditions
Chronic Conditions

SAMPLE TREATMENTS
Mindful Mud Cranium Care
Adobe Purification Ritual
Dead Sea Envelopment
Moor Back Treatment
Sulfur Mud Pack

SUMMARY
Fangotherapy is the use of **mud**, **peat**, and **clay** for healing purposes (Figure 9-1). The word, **fango**, is the Italian word for mud and so strictly speaking peat and clay should not be labeled as fango treatments. However, most Spas use the term fango loosely and so to avoid confusion, the more general meaning of the word is adopted here.

Each of these materials (mud, clay and peat) has its own special properties but in general they hold heat and are useful as a thermal application for chronic conditions. They also stimulate circulation and lymph flow, support detoxification and help the body to relax. Some types of fango have anti-inflammatory and pain relieving properties that make them useful for soft-tissue injury. The sensation of being covered in thick warm mud is a unique experience for clients and so services featuring fango are a regular and popular item on spa menus. This chapter aims to briefly describe the classic use of fango, identify different type of fango products and build on the skills learned in previous chapters. New treatments are described (scalp and neck treatment, back treatment) in step-by-step detail, but services like the full body fango cocoon assume that the reader has achieved proficiently with the treatments outlined in earlier chapters. This chapter also introduces the use of fango for the different stages of inflammation in the healing process. This information will be of use to the massage therapist who works at a medical spa or who regularly treats soft-tissue injury in their private practice.

The reader may want to review chapter 3 (Foundation Techniques for Spa Treatment Delivery), chapter 6 (Exfoliation treatments) and chapter 7 (Body wraps) before delivery of the treatments in this chapter. The therapist may also want to read the section on Indian head massage in chapter 11 (Ayurveda) for ideas on strokes to use during the scalp and neck treatment.

**Fangotherapy in Europe**

Many early European spas originated around thermal areas with mineral hot springs. The mud around a hot spring was used for its therapeutic mineral content. It was not uncom-
mud was used in its natural state, but now it is found at the spas. Today more than 170 hotels with spa facilities circle the 130 mineral springs. Traditionally the mud was used in its natural state, but now it is ‘matured’ in special tanks to improve its therapeutic properties. The maturation process developed by the Pietro d’Abano Spa Research Centre, involves incubating the mud in Euganean mineral water for 50–60 days allowing the non-pathogenic microorganisms present to multiply. The mud is used to treat osteoarthritis, fibromyalgia, soft-tissue injury, inflammation and some skin conditions.

In Europe, fangotherapy usually takes place once or twice a year at health spas under a doctor’s guidance. Although the regime may vary from spa to spa, the patient will have fasted for at least 4–6 hours before the treatment. The treatment generally begins with mud applied to the body at a temperature of around 104°F–115°F (40–46°C). Full body applications are left for 20 minutes while spot treatments are left in place for up to 30 minutes. The mud treatment is followed by hydrotherapy in the form of a mineral soak in the thermal waters of the region, or a hot and cold contrast shower. Sometimes the patient is wrapped in blankets to increase perspiration after the hydrotherapy soak. The treatment ends with a massage and a long nap.

As mentioned in chapter 1, the Italian towns of Abano, Montegrotto, Galzignano and Battaglia are famous for their thermal baths, which have a long history of use. Over the centuries, people have come to the area for the healing properties of the thermal fango (Euganean Hills mud) that is found at the spas. Today more than 170 hotels with spa facilities circle the 130 mineral springs. Traditionally the mud was used in its natural state, but now it is ‘matured’ in special tanks to improve its therapeutic properties. The maturation process developed by the Pietro d’Abano Spa Research Centre, involves incubating the mud in Euganean mineral water for 50–60 days allowing the non-pathogenic microorganisms present to multiply. The mud is used to treat osteoarthritis, fibromyalgia, soft-tissue injury, inflammation and some skin conditions.

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The increasing focus on fitness and wellness has fueled the re-emergence of the spa industry and with it the use of fango for healing. At the time of writing fango treatments are mainly used for skin care in the USA. This may be because their therapeutic benefits have yet to be fully understood or appreciated. Another factor may be that most spa clients are familiar with the idea that fango improves the texture of the skin but may be less clear about its benefits for the musculoskeletal system and body. This is likely to change as information spreads about the use of fango treatments for decreasing pain from chronic conditions like osteoarthritis or soft-tissue injury, supporting detoxification, reducing stress and relaxing the body.

**Types of Products Used in Fangotherapy**

All types of fango have heat retention properties and can be warmed up and applied to relax the body or decrease muscular tension. Clay, mud and peat have different therapeutic properties and uses. Clay is mainly mineral (derived from rock) and is the most ‘drawing’ and stimulating of the fango substances. Mud is also predominantly mineral but has small amounts of organic components that give anti-inflammatory or analgesic properties. Peat is therapeutically the most active substance of the three as it is mainly organic and derived from the break down of plant material over thousands of years. A number of European studies had concluded that peat is anti-inflammatory, analgesic, a circulatory stimulant, antiviral, immune-boosting, and endocrine balancing. Table 9-1 gives an overview of fangotherapy substances.

**CLAY**

Clay is a general term for a variable group of fine-grained natural materials that are usually ‘plastic’ when moist. When viewed under an electron microscope, clay particles are about 100 times longer than they are wide. If water is added to dry clay, the moisture is held between the flat plates by surface tension so that the particles do not pull apart, but instead, slide easily over one another. This gives moist clay its smooth and creamy consistency.

Many different types of clay are commercially available from different soils and environments around the world. Clays from marine sediments or from areas around hot springs or geysers, usually have a higher mineral content than other clays, but all commercially available clay has the same basic properties. First, clay holds heat and so can be warmed and used to decrease muscle tension and relax the body. Second, clay is highly absorbent and is used to draw impurities and moisture from the surface of the skin. This
‘drawing’ action simulates circulation and lymphatic flow and purifies the skin. Finally, clayss readily suspend to form an emulsion in water or other liquid substances. This property is useful in cosmetics as clay helps to hold other substances together and prevent separation. Clay is regularly used as an emollient and colorant in powders, liquid foundations, lotions and skin masks. This characteristic also makes it useful as a carrier product for other therapeutic substances. Items like seaweed, herbal infusions, essential oils and natural food products (yogurt, honey, milk, fruit juices and mashed fruits) can be mixed into clay to make interesting treatment products. The use of clay is often associated with the areas in which it was mined. For example, Sedona clay is no more healing than other clays, but its link to the majestic red rocks of Arizona and to Native American healing traditions make it a popular choice with clients. Table 9-2 gives an overview of some popular and commercially available clay. Table 9-3 offers some easy clay recipes for in-house treatment products.

**MUD**

While mud is mainly mineral in origin like clay, it contains 2–4% organic substances which play an important role in its therapeutic use. Therapeutic mud is “matured” or “ripened” in natural mineral water. The maturing process for each mud may be slightly different, but generally it involves the oxidation and reduction of the mud over a period of up to 12 months. The process of maturing the mud is characterized by changes in the chemical composition of the mud, and changes in its appearance. A good example is the maturing process used at the Piestany spa in Slovakia. The brown Piestany mud is matured to increase its sulfur content by “curing” the mud in outdoor storage units and exposing it to bacteria which reduce the sulfates present in the mud to sulfides. This changes the muds color from brown to black. Up to 40,000 patients come to the spa each year to receive its famous fango treatment for arthritis.

Sulfur is perhaps the most important component in the different kinds of therapeutic mud and occurs naturally in the vicinity of volcanoes and hot springs. Sulfur baths have been researched as a viable means of reducing oxidative stress on the body and decreasing inflammation in muscles and joints. Sulfur rich mineral and mud baths are useful in the treatment of osteoarthritis, rheumatoid arthritis and other inflammatory conditions. Individuals report that they experience increased strength, decreased morning stiffness, better walking ability and decreased pain after a course of sulfur mud treatment. Therapeutic mud is also used successfully for bursitis, tendinitis, sprains, strains and other musculoskeletal injuries and disorders.
One of the most popular types of sulfur-containing therapeutic mud is that obtained from the Dead Sea region in Israel. The extremely saline water (27% salt) is 10 times saltier than the Mediterranean Sea, and has a high concentration of calcium, magnesium, sodium, potassium and bromine. Research on Dead Sea mud supports its use in the treatment of arthritis, rheumatoid arthritis, skin problems and respiratory diseases.

**PEAT**

*Sphagnum* is the main genus of mosses that form a bog. As the *Sphagnum* moss decays, the bog becomes filled with a deeper and deeper layer of dead *Sphagnum* which is known as peat. The lack of oxygen in the bog and the acidic conditions created by *Sphagnum* slows the growth of microbes. This is why human bodies unearthed from peat bogs thou-
<table>
<thead>
<tr>
<th>NAME</th>
<th>RECIPE</th>
<th>PROPERTIES</th>
<th>USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper Clay</td>
<td>Spot treatment: 4 drops of juniper berry essential oil and water to the desired consistency.</td>
<td>Stimulating, warming, detoxifying, circulatory &amp; lymphatic stimulant, revitalizing</td>
<td>Foot mask for sore feet, FB fango cocoon for detoxification, Spot treatment for sore muscles</td>
</tr>
<tr>
<td></td>
<td>FB treatment: 8 drops of juniper berry, 10 drops of grapefruit and 2 drops of lemon oil with water to the desired consistency.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee Clay</td>
<td>Spot treatment: One shot of espresso and warm water or strong coffee to the desired consistency.</td>
<td>Stimulating, firming, circulatory stimulant</td>
<td>Spot treatment for body contouring or cellulite</td>
</tr>
<tr>
<td></td>
<td>FB treatment: 3 shots of espresso and warm water or strong coffee to the desired consistency.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peppermint Clay</td>
<td>Spot treatment: 3–6 drops of peppermint essential oil and warm water to the desired consistency.</td>
<td>Stimulating, cooling, revitalizing, analgesic, circulatory &amp; lymphatic stimulant</td>
<td>Foot mask for tired feet, spot treatment for sore muscles, spot treatment for cellulite</td>
</tr>
<tr>
<td>Rose Petal Clay</td>
<td>Spot treatment: 1 teaspoon of dried and powdered rose petals or lavender, 1 drop of rose or 4 drops of lavender essential oil and warm water to the desired consistency.</td>
<td>Relaxing, soothing, calming, softening</td>
<td>Foot or hand mask for a gentle treatment, FB mask for a relaxation treatment</td>
</tr>
<tr>
<td>Lavender Clay</td>
<td>FB treatment: 2 tablespoons of dried and powdered rose petals or lavender, 2 drops of rose or 8 drops of lavender essential oil and warm water to the desired consistency.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain Away Clay</td>
<td>Spot treatment: 2 drop sweet birch oil, 2 drop eucalyptus oil, 1 drop German chamomile, hemp seed oil to desired consistency (do not use water).</td>
<td>Analgesic, circulatory stimulant, antispasmodic, anti-inflammatory</td>
<td>Application to a specific joint, application to an area of pain (back, hamstring, etc), spot treatment for sore feet</td>
</tr>
<tr>
<td></td>
<td>FB treatment: 6 drops sweet birch oil, 4 drops eucalyptus oil, 2 drops German chamomile oil, hemp seed oil to desired consistency (do not use water).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egyptian Clay</td>
<td>Spot treatment: 2 drops frankincense, 2 drops myrrh, 1 drop rose and water to the desired consistency.</td>
<td>Relaxing, softening, soothing, calming</td>
<td>For a treatment inspired by Egypt, for a FB fango cocoon aimed at relaxation.</td>
</tr>
<tr>
<td></td>
<td>FB treatment: 8 drops frankincense, 4 drops myrrh, 1 drop of rose, 1 drop of geranium and water to the desired consistency.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botanical Clay</td>
<td>A variety of powdered herbs can be used and mixed with clay powder. Add 2 tablespoons of powdered herbs to every cup of clay. Use a herbal infusion or tea to mix up the clay powder. For example a green tea and lemongrass make a nice botanical combination.</td>
<td>The properties will be based on the botanicals that are used in the mix</td>
<td>Foot or hand mask, FB detoxification treatment, slimming treatment</td>
</tr>
</tbody>
</table>
sands of years after burial are perfectly preserved. As the rate of decomposition is very slow, the minerals usually recycled by living things remains in the peat.8 This is why peat is therapeutically active and why gardeners use peat to build up the fertility of soil.

Peat is usually broken down into two main commercial categories; high-moor peat or low-moor peat. The basis for this is unclear and the two types are often so similar that they are difficult to separate without information on their geographical origin.9 Spas generally prefer to use low-moor peat (a well-known lowland peat is Moor mud from the Neydharting Moor in Austria) because it is thought to have a broader range of therapeutic properties than high-moor peat. This idea reflects the belief that compared to high-moor peat, low-moor peat is composed of a wider range of plant species and so is likely to have a wider range of therapeutic properties. However research gives no clear evidence of a significant difference in the therapeutic benefits of the two types of peat.

### General Treatment Considerations

Before providing a fango treatment, assess the contraindications for the treatment and pay attention to the special storing, mixing, warming and processing requirements for fango.

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**Table 9-3 (continued)**

<table>
<thead>
<tr>
<th>NAME</th>
<th>RECIPE</th>
<th>PROPERTIES</th>
<th>USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunny Clay</td>
<td>One half cup of powdered oatmeal is added to every one half cup of clay powder and mixed with warm juice (apple, cranberry, pineapple or orange work well) to the desired consistency.</td>
<td>Refreshing, softening, revitalizing</td>
<td>Foot or hand masks, FB cocoons aimed at relaxation and revitalization</td>
</tr>
<tr>
<td>Natural Food Items Clay</td>
<td>Natural food items can be blended with clay and water to form treatment products. For example fresh pumpkin, fresh avocado, fresh mango or fresh papaya might be mixed with clay and water in a blender to the desired consistency. Note: Blend the clay as little as possible as it can lose some of its permeability with over-mixing.</td>
<td>Refreshing, relaxing, softening, stimulating</td>
<td>Foot or hand treatment, back treatment, hair treatment, FB cocoon</td>
</tr>
</tbody>
</table>

Each of these products can be mixed into any type of clay base. The reader will notice that the exact amount of clay or liquid is not indicated. This is because different clays hold water and mix up differently. The reader is advised to start with 1/2 cup of clay for a spot treatment and 2 cups of clay for a full body (FB) treatment. More clay may be needed depending on the size of the client. The different liquids will be added until the desired consistency is reached. Aim for a creamy texture that is not too runny. To powder a botanical ingredient it is dried and placed in a coffee grinder.

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**BOX 9-1 Broaden Your Understanding**

Fango Benefits for the Skin

Estheticians value fango applications for the reason that clay, mud and peat benefit the skin and improve the skin’s texture. Because of its absorbent nature, clay is the most popular choice for oily skin types. Clay draws impurities out of the skin, stimulates circulation which aids in nutrient exchange, and retextures the skin by supporting natural exfoliation. Clay can also be softening, even for dry skin so long as it is kept moist while it is on the skin and not allowed to dry out.

Mud and peat soften the skin’s texture and some minerals may be absorbed from the mud into the skin, although the evidence for this is unclear. Some studies suggest that fango treatments help to normalize the pH of the skin, strengthen the barrier function of the stratum corneum, decrease trans-dermal water loss and normalize sebum flow making fango useful for both dry and oily skin.10, 11 After a full body fango application clients will often notice the improved texture of their skin and its softness.
CONTRAINDICATED INDIVIDUALS

Clients with heart or circulatory conditions, who are pregnant, have a fever, diabetic neuropathy or neurological disorders should not receive full body hot fango treatments. Spot applications on such individuals may be appropriate for use depending on the medical condition, the temperature of the fango (98–102°F is recommended), the length of the treatment and the other products that are being used.

BROKEN OR INFLAMED SKIN

The use of peat and mud is not advised on broken or inflamed skin. While peat and mud are regularly used in Europe and by estheticians for skin care, broken skin is prone to infection. Peat and mud is not necessarily checked for harmful pathogens or held to any standardized quality requirements. Clay can be used with oily skin that has minor blemishing, but severe acne, which might be located on a client’s back, should not be treated except by an esthetician or dermatologist.

FANGO TEMPERATURE

Fango can be applied from room temperature up to 115°F. It is interesting to note that in Europe the fango is applied at a temperature of 104–115°F even in situations where there is acute inflammation. Despite the excellent results they achieve in Europe, it is better to err on the side of caution and not use hot temperatures for inflammation. Apply fango at room temperature or chilled to the area of injury, and apply heated fango to the rest of the body. Areas distal to the injury site should not be treated with fango to prevent stagnation in the distal tissue. An overview of the use of fango for soft-tissue injury and inflammation with specific temperature recommendations is given below. A metal probe-type thermometer or a latte thermometer can be used to check the temperature of the fango.

MIXING AND STORING FANGO PRODUCTS

When using mud, clay or peat they should not be mixed or stored in metal containers as they may react chemically with the metal. Clays can lose some of their permeability if they are over-processed or over-mixed. It is recommended that fango products are heated once only in a double boiler, used shortly afterwards and the leftovers discarded.

PREVENTING DRY OUT

Mud and peat are not commonly allowed to dry out on the body. They are covered in plastic or with a hot, damp towel during the treatment to keep them moist. This is because the therapeutic properties of the mud are affected if the fango dries out and the microorganisms living in the fango are killed. For certain purposes (e.g. to draw blood to an area or oily skin on the back) clay can be allowed to dry out slightly but not completely. Clay that is too dry is not good for the skin as it can become irritated and dehydrated as the clay pulls out its moisture and oils. Use a moisturizing lotion after using a clay product on any area of the body.

The Full Body Fango Cocoon

A full body fango cocoon is indicated for a wide range of conditions including low energy, low immunity, stress, muscle tension and soreness, chronic soft tissue conditions like fibromyalgia, cellulite, contouring treatments and for detoxification. Full body applications of mud, clay or peat are difficult to carry out in a dry-room setting as product removal is time-consuming and the client may get cold and impatient. Gel-based fango products are now available and are easy to remove in a dry-room, but the fango in these products is significantly diluted. If a shower is not available, a gel-based product or spot treatment is recommended.

In the full body fango cocoon snapshot, after the fango has been removed, a foaming body wash is used to help clean off any remaining traces of fango if a gel-based product was not used and no shower is available. While step-by-step directions for a cocoon wrap are described in chapter 7 (Body Wraps), the reader will notice that this outline does not follow the directions exactly. As with any service, treatment steps can be mixed and matched depending on the facility, products and the preferences of the individual therapist.

Snapshot: The Full Body Fango Cocoon

Indications
Stress, muscle tension and soreness, chronic soft tissue condition, relaxation, detoxification, body contouring, revitalization.

Contraindications
Heart or circulatory conditions, pregnancy, fever, diabetic neuropathy or neurological disorders, recent soft-tissue injury, any condition contraindicated for massage.

Supplies for the Treatment Table Set-Up
(from the bottom layer to top layer)
1) Blanket (wool or cotton) placed across the table (horizontally) so that the long edges are at 90 degrees to the table edges,
2) Thermal space blanket placed horizontally (optional),
3) A plain flat sheet placed in a standard orientation with its long edges parallel to the edge of the table (if the fango needs to be removed in a dry room),
4) A plastic sheet placed horizontally,
therapist is encouraged to include a fair amount of massage in this treatment. Any other treatment product could be used in place of the fango in this outline depending on the treatment goals. An overview of this service is given in the Fango Back Treatment snapshot and in figure 9-2.

**Supplies for the Work Table Set-Up**
1. Dry brushes,
2. Fango warming in a double boiler,
3. Application brush or vinyl gloves,
4. Bowl of warm water,
5. Foaming body wash product,
6. Massage cream,
7. Aura mist,
8. Soda cooler,
9. Hot moist towels,
10. Dry hand towels,
11. Bolster

**Supplies for the Treatment Table Set-Up**
(from the bottom layer to the top layer)
1) Bottom massage sheet,
2) Bath towel,
3) Top massage sheet,
4) Blanket or bath sheet for warmth,
5) Bolster

**Procedure if a Shower is Available**
1) Exfoliate or dry brush posterior body areas,
2) Turn the client supine,
3) Exfoliate or dry brush anterior body areas,
4) Application of fango using the sit-up method,
5) Cocoon for 20–30 minutes – massage the feet and/or face while the fango is processing,
6) Unwrap,
7) Remove the fango from the client’s body and remove the plastic sheeting under the client,
8) Cleanse and then massage each anterior body area,
9) Aura mist,
10) Turn the client prone,
11) Cleanse and then massage each posterior body area.

**Procedure Option 1**
1) Apply steamy towels to the back,
2) Cleanse the back,
3) Exfoliate the back,
4) Apply a skin toner to the back,
5) Massage the back,
6) Remove excess massage cream or oil,
7) Apply fango to the back and cover with plastic,
8) Drape the back and place a warm pack on top of the drape so that it keeps the fango warm,
9) Massage posterior legs (while the fango is in process),
10) Remove fango,
11) Apply a finishing product,
12) Turn the client supine,
13) massage the neck and shoulders,
14) Aura mist

**Indications**
late sub-acute to chronic back pain, stiff muscles from a workout or over-exertion, stress, chronic muscular holding patterns, or for general relaxation.

**Contraindications**
This particular outline is contraindicated for acute inflammation, fango is also contraindicated for broken skin, severe back pain or posterior leg pain from an undiagnosed cause or any condition contraindicated for massage.

**Dry Room Procedure**
1) Dry brush posterior body areas,
2) Application of fango to posterior body areas,
3) Turn the client supine using the flip-over method,
4) Dry brush anterior body areas,
5) Application of fango to anterior body areas,
6) Cocoon for 20–30 minutes – massage the feet and/or face while the fango is processing,
7) Unwrap,
8) Cleanse and then massage each anterior body area,
9) Aura mist,
10) Turn the client prone,
11) Cleanse and then massage each posterior body area.

**Procedure Option 1**
1) Apply steamy towels to the back,
2) Cleanse the back,
3) Exfoliate the back,
4) Apply a skin toner to the back,
5) Massage the back,
6) Remove excess massage cream or oil,
7) Apply fango to the back and cover with plastic,
8) Drape the back and place a warm pack on top of the drape so that it keeps the fango warm,
9) Massage posterior legs (while the fango is in process),
10) Remove fango,
11) Apply a finishing product,
12) Turn the client supine,
13) massage the neck and shoulders,
14) Aura mist

Fango back treatments can be given by massage therapists to decrease lower back or upper back pain, to release tense muscles, for general relaxation or for revitalization. The
Figure 9-2  The fango back treatment. (A) Steam the back. (B) Exfoliate and cleanse. (C) Massage the back. (D) Apply the fango to the back. The product used in this picture is Moor mud (a peat). (E) Cover the fango with plastic. (F) Process – massage the posterior legs. (G) Remove the fango. Remove as much fango as possible with the plastic body cover. Remove remaining fango with hot towels. (H) Apply a finishing product to the back.
**STEP 4: MASSAGE THE BACK**

Massage the back with Swedish, deep tissue or other massage techniques for 10–20 minutes depending on the time available for the individual treatment. Remove the massage oil or cream with a hot towel and apply a toner to the skin with cosmetic sponges.

**STEP 5: APPLICATION OF WARM FANGO**

Check the temperature of the fango with a metal probe thermometer or a latte thermometer. It should be warmed to between 100–110°F. Apply a thick layer of warm fango to the back with a brush, or massage it into the body with the hands while wearing vinyl gloves. Cover the fango with a pre-cut piece of plastic wrap sheet and place an insulating blanket and warm pack (hydroculator pack, rice or flax seed microwavable pack, etc) on top.

**STEP 6: PROCESS - MASSAGE THE LEGS AND FEET**

Massage the posterior legs and feet while the back processes in the fango. The treatment can be further tailored to the needs of the client by offering a sports-oriented massage with essential oils for sore muscles such as bay laurel or sweet birch, or a firming massage with essential oils of grapefruit and thyme.

**STEP 7: REMOVE THE FANGO**

After 15–20 minutes remove the fango with hot towels and apply a skin toner with flushing massage strokes. Most alcohol-free toners contain glycerine which gives enough lubrication for massage.

**STEP 8: APPLICATION OF A FINISHING PRODUCT**

Apply a finishing product that is appropriate for the treatment goals. For example, a sore muscle treatment might end with a tingly fitness gel that contains pain relieving camphor or peppermint. A general revitalization treatment might finish with a cream rich in citrus oils which boost immunity and firm the tissues.

**SESSION END**

Turn the client into the supine position for a neck, shoulders and face massage. Finish the service with an aura mist to fill the treatment room with a refreshing scent.
Sanitation

Some exfoliation mitts, textured cloths and gloves are meant to be washed in a washing machine with hot water and dried in the dryer. If they cannot stand up to being washed, they should be disposed of after use on the client or wrapped up in plastic and sent home with the client.

The Fango Scalp and Neck Treatment Procedure

The scalp consists of five layers that include the skin, subcutaneous tissue, epicranius (including its aponeurosis the galea aponeurotica), loose connective tissue and the pericranium. The skin, the subcutaneous tissue and the galea aponeurotica are firmly attached to each other. The thin, sheet-like muscles of the scalp move the scalp, ears and eyebrows. The thin, small muscles of the face create the movements that lead to facial expression. Every day these muscles get a workout and tension in facial and scalp muscles can play a significant role in tension headache pain or pathologies such as temporomandibular joint syndrome (TMJ). The fango scalp and neck treatment is indicated for neck tension, tension headache, face tension, relaxation, stress reduction and revitalization. This service allows massage therapists to focus in on an area that is often touched on only briefly in a full body massage. While fango is used in this treatment outline, seaweed or melted shea butter can also be used with good results.

In this service oil and fango are massaged through the hair to the scalp. Obviously this will mess up the client’s hair and shampooing the hair is out of the scope of practice for massage therapists in most states. To avoid scope of practice conflicts, the therapist has 3 main options: 1) The client can be passed on to a cosmetologist who will finish the service by washing, cutting and/or styling the client’s hair. 2) The client can wash and condition their own hair (give high quality professional products) in a shower or tub. 3) Most of the fango can be removed with hot moist towels so that the client can go home and wash their own hair. In this case, the type of treatment product used is important. Most fango (or shea butter) will not damage the hair or irritate the scalp if it is left on for an extended period of time. Seaweed on the other hand may irritate the scalp and so should be avoided in this instance. The scalp and neck treatment snapshot and figure 9-4 gives an overview of this service.

### Indications
- Neck tension, face tension, stress reduction, relaxation, revitalization

### Contraindications
- Broken skin on the scalp, scalp condition, recent soft-tissue injury such as whiplash, severe headache pain or migraine, illness, fever or any condition contraindicated for massage.

### Supplies for the Treatment Table Set-Up
(from the bottom layer to top layer)
1) Bottom massage sheet,
2) Plastic body wrap placed horizontally at the top end of the massage table,
3) Top massage sheet,
4) Blanket or bath sheet for warmth,
5) Bolster,
6) Hand towel rolled into a ‘sausage’ to be placed under the client’s neck,
7) Warm pack for the belly,
8) Eye pillow for the eyes,
9) Warm pack or microwave booties for the feet. Figure 9-3 shows the orientation of the plastic on the massage table and how it is used to protect the floor from fango accidents.

### Supplies for the Work Table Set-Up
1) Soda cooler,
2) Hot moist towels,
3) Scalp oil in a bottle with a flip top lid warming in a hot water bath,
4) Massage cream,
5) Fango warming in a double boiler,
6) Comb,
7) Hair clip,
8) Plastic hair cover or shower cap, 9) Aura mist, 10) Essential oils (optional)

### Procedure
1) Comb out the hair if needed,
2) Steam the head and face,
3) Massage the neck,
4) Massage the Scalp,
5) Apply fango to the scalp,
6) Massage the feet and/or the hands while the fango is processing,
7) Remove the fango from the hair, 8) Massage the face, 9) Clip the hair up and cover it with a plastic shower cap (optional), 10) Aura mist

### SESSION START
The client will need to remove their top and their socks (for foot massage) for this service. Clients often feel more comfortable if they leave on their underclothing but remove...
their clothes. This prevents their clothing from getting wrinkled or from bunching and restricting the client’s movement. The client is bolstered as they would be for massage and covered with a top sheet and blanket for warmth. A hand towel is rolled up and placed under the neck to give support. Warm packs placed on the belly and/or under the feet are soothing and comforting. If the client’s hair is tangled it is helpful to comb it out gently before the treatment starts.

To begin the service place one drop of an essential oil in the palm of the hands, rub them together briefly and place them in an arch over the client’s nose with the hands about one inch above the highest point of the nose. Ask the client to take a slow, relaxing breath. Essential oils that work well for this type of inhalation include lemon, Spanish sage, peppermint, rosemary, common sage or eucalyptus although any oil could be used.

**STEP 1: STEAM THE HEAD AND FACE**

Remove a steamy towel from the soda cooler and place it around the top of the head. A second towel is placed over the face. Allow the towels to steam the head and face for approximately one minute. Remove the towels and repeat this procedure with a second set of towels if desired. It is nice to scent these towels with essential oils or with herbs. If they are scented the therapist should use an oil that contrasts with the aroma they used in the hand inhalation described above.

**STEP 2: MASSAGE THE NECK**

Remove the rolled hand towel that is supporting the client’s neck and give a ten to fifteen minute neck massage using a full range of strokes and techniques. Include the upper chest area and arms if desired. Massage oil or a massage cream can be used for this massage.

**STEP 3: MASSAGE THE SCALP**

Test the temperature of the scalp oil in the bottle with the flip top lid to ensure that it is not too hot. Part the hair down the middle and pour warm oil down the parting from the hairline to the whorl of hair at the crown of the head. The whorl is the place where the hair changes the direction of its growth at the back of the head. Using soft pressure, zigzag the oil into the scalp working out from the parting towards the sides of the head. Direct pressure and gentle circular friction applied down the path of the parted hair stimulates the scalp and helps to relax tight muscles. From the centerline created by the parting, jump down one inch on one side of the head and create a new parting flipping the excess hair over the other side of the head. Repeat the oil and massage sequence. Jump down another inch and create a new parting then repeat the oil and massage sequence. Jump down another inch and create a third parting and repeat the oil and massage sequence. The final parting of the side of the head should start just above the ear. When one side has been oiled and massaged, the entire process is repeated on the other side of the head. This ensures that the entire scalp has been covered in oil. The therapist can now massage the scalp with a variety of techniques for an additional five to ten minutes. Be sure to include the ears in the massage as this is an area that can hold a great deal of tension. A number of head massage techniques are shown in chapter 11 (Ayurveda) under the Indian Head Massage section. At the end of the massage, the hair is combed straight back from the forehead in preparation for the application of fango.

**STEP 4: APPLICATION OF WARM FANGO TO THE HEAD**

Wearing vinyl gloves, apply warm fango from the hairline to the back of the head. The hair is then twisted up and a moist hot towel is used to cover the fango and wrap around the head. A second dry towel is placed over the top of the moist hot towel to insulate it.

**STEP 5: PROCESS–MASSAGE THE FEET AND/OR THE HANDS**

The feet and/or the hands can be massaged while the fango is processing on the scalp. These areas can also be exfoliated or treated with an application of fango or a paraffin dip. For
Figure 9-4  The scalp, hair, and neck treatment. (A) Place a hot moist towel over the hair. (B) Steam the face. (C) Massage the neck. (D) Oil the hair. (E) Massage the scalp. (F) Application of fango. The product used in this picture is a marine fango. (G) Face massage. The face massage can take place while the fango is in process on the scalp or it can be used as the final step in the treatment.
shorter treatments, the face is massaged while the fango is processing on the scalp and the service ends (as far as the massage therapist is concerned) with the removal of the fango from the hair.

**STEP 6: REMOVE THE FANGO FROM THE HAIR**

Remove the insulating towel and pull the hot moist towel from the hair taking as much fango as possible with it. A second and then a third hot moist towel is placed over the hair and used to gently remove fango from the head. It is not possible to remove all of the fango or scalp oil from the hair in this manner and so the hair is now twisted and clipped up out of the way in anticipation of the final step of the service, the face massage.

**STEP 7: FACE MASSAGE**

Massage the face using either a heavy face cream or a light massage cream and then move on to the neck as both the head and neck will have been immobile for some time while the fango was processing. The face massage typically takes from five to fifteen minutes depending on the time available. Face massage techniques are described in chapter 3 (Foundation Techniques for Spa Treatment Delivery).

**SESSION END**

Spritz an aura mist in a high arch over the client to end the service and fill the treatment room with a refreshing scent. The session can end in three different ways. 1) Pass the client on to a cosmetologist for a shampoo, cut and style. 2) Escort them to a shower or soaking tub where they can relax and shampoo their hair. 3) The client goes home to wash their hair.

**Fango Applications for Musculoskeletal Injury and Disorder**

Massage and fango treatments are a powerful combination for the treatment of musculoskeletal injuries or conditions. While some believe that mud therapy is a purely thermal process and therefore similar to any topical application of hot or cold, research in Europe suggests otherwise. In a study conducted in Italy, the level of hormone peptides from proopiomelanocortin, plasma beta-endorphin and some hormones of the pituitary-adrenal glands, were all decreased when mud pack treatments were used. The decrease in the levels of these peptides and hormones led to a reduction in the stress experienced by the patient, which in turn supported the healing process. These effects began after the first of twelve mud sessions and lasted for thirty days after the treatments had finished.

In osteoarthritis, pro-inflammatory cytokines and nitric oxide play a role in progressive cartilage degradation and in the secondary inflammation of the synovial membrane of the affected joint. Mud pack treatment can positively affect the chemical mediators of inflammation and decrease damage to cartilage and the synovial membrane. In Germany, a study conducted at the Department of Natural Cure, Blankenstein Hospital, in Hattingen, showed that peat components had positive effects on both the endocrine and immune system. A study in France showed that vascular changes induced by mud pack therapy are not fully explained by vasodilation in response to local temperature elevation. While the other mechanisms involved could not be determined, it was concluded that mud packs could be successfully used to address vascular insufficiency in the lower limbs.

The goal of this section is to encourage therapists to explore the use of fango in treatments to reduce inflammation, decrease stress, increase range of motion, increase circulation and decrease adhesion formation, and for conditions including soft-tissue injury, fibromyalgia, osteoarthritis and rheumatoid arthritis. It is assumed that a therapist using fango for such conditions understands the principles of hydrotherapy, has a solid understanding of pathology, and has prior knowledge and experience of working with these conditions. For further information on these topics therapists are referred to A Massage Therapist’s Guide to Pathology by Ruth Werner, and Massage for Orthopedic Conditions by Thomas Hendrickson.

**ACUTE CONDITIONS**

In Massage for Orthopedic Conditions, Hendrickson summarizes the causes of pain as mechanical, chemical and thermal. When abnormal tension is placed on soft tissue, especially over a period of time, it leads to tissue damage and inflammation resulting in mechanical injury. Chemicals that are released as mediators of inflammation irritate nerve endings leading to increased pain and muscle guarding. This in turn causes hypertonic muscles and ischemia (low oxygen) which increases the chemical toxicity of the tissue.

In an acute situation, where pain, loss of function, redness, heat and swelling are present, the therapist is unable to manipulate the soft-tissue structures involved in the injury. The general treatment goal is to reduce inflammation, reduce pain, reduce sympathetic nervous system firing, and maintain any available range of motion unless passive movement is contraindicated as with bursitis. Often the therapist will apply an ice pack and gently massage the other areas of the body if the client can tolerate it. In some situations the client is only able to tolerate the lightest touch and so only energy-work techniques are appropriate.
Mud or peat applications are ideal in this situation because they are more relaxing for the client than ice, and because the mud may affect the chemical mediators involved in the inflammatory process. The application method is the same in most cases of inflammation including rheumatoid arthritis, bursitis, osteoarthritis in flare up, sprains, strains, tendonitis, tenosynovitis, and whiplash. Fango is applied to the area at the beginning of the treatment at a temperature of 50–75°F (10–24°C). A thermometer is used to monitor the temperature of the product. Anti-inflammatory essential oils such as German chamomile and Helichrysum can be applied to the skin at a 10% concentration (60 drops of essential oil to every ounce of carrier product) before applying the mud. Although this may seem too high to American aromatherapists, this is the concentration used in Europe for topical applications and is very effective so long as the oils are not skin irritants. Essential oils for acute, sub-acute and chronic inflammation are described in table 9-4 while sample blends for the stages of inflammation are given in table 9-5.

The soft-tissue structures in an acute injury are already under extreme pressure due to the build up of fluid in the tissue. The fango cannot be slathered on the body area as it would be in a normal treatment as the area will be sensitive.

Instead the fango is moistened with mineral water until it has the consistency of a smooth paste. This paste is spread on a cotton cloth or pillowcase in a half-inch to one-inch layer (Fig. 9-5). The cloth is placed gently over the affected body area with the mud facing towards the skin. It is left in place for up to 30 minutes while associated areas are massaged (so long as the client can tolerate touch). Warm fango (98° F / 36° C) can be applied to areas proximal to the injury site for its relaxing and soothing effect, and to dissipate muscle spasms. Note that warm mud should not be applied to areas distal to the injury site due to the restricted blood flow in these tissues caused by the injury. Gently remove the mud with warm water and sponges at the end of the treatment.

### Table 9-4 Sample Essential Oils for Stages of Inflammation

<table>
<thead>
<tr>
<th>ACUTE TO EARLY SUB-ACUTE</th>
<th>LATE SUB-ACUTE</th>
<th>CHRONIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Birch</td>
<td>Bay Laurel</td>
<td>Bay Laurel</td>
</tr>
<tr>
<td>White Camphor*</td>
<td>Sweet Birch</td>
<td>White Birch</td>
</tr>
<tr>
<td>German Chamomile</td>
<td>White Camphor*</td>
<td>White Camphor</td>
</tr>
<tr>
<td>Cypress</td>
<td>Carrot Seed</td>
<td>Clove</td>
</tr>
<tr>
<td>Fennel Seed</td>
<td>Roman Chamomile</td>
<td>Eucalyptus</td>
</tr>
<tr>
<td>Geranium</td>
<td>Eucalyptus</td>
<td>Fir Needle</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>Fir Needle</td>
<td>Ginger</td>
</tr>
<tr>
<td>Helichrysum</td>
<td>Juniper Berry</td>
<td>Juniper Berry</td>
</tr>
<tr>
<td>Lavender</td>
<td>Lavender</td>
<td>Lavender</td>
</tr>
<tr>
<td>Lemon</td>
<td>Lemon</td>
<td>Sweet Marjoram</td>
</tr>
<tr>
<td>Peppermint</td>
<td>Sweet Marjoram</td>
<td>Peppermint</td>
</tr>
<tr>
<td>Myrrh</td>
<td>Peppermint</td>
<td>Scotch Pine</td>
</tr>
<tr>
<td>Tea Tree</td>
<td>Scotch Pine</td>
<td>Rosemary</td>
</tr>
<tr>
<td>Wintergreen</td>
<td>Rosemary</td>
<td>Turmeric</td>
</tr>
<tr>
<td>Yarrow</td>
<td>Wintergreen</td>
<td>Wintergreen</td>
</tr>
</tbody>
</table>

* Brown and yellow camphor contain high concentrations (up to 80%) of safrol which is toxic and carcinogenic. White camphor contains no safrol and is considered non-toxic and non-irritant.
### Table 9-5 Sample Essential Oil Blends for Stages of Inflammation

<table>
<thead>
<tr>
<th>ACUTE—EARLY SUB-ACUTE</th>
<th>LATE SUB-ACUTE</th>
<th>CHRONIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blends are at a 10%</td>
<td>Blends are at a 3%</td>
<td>Blends are at a 2.5%</td>
</tr>
<tr>
<td>Concentration</td>
<td>Concentration</td>
<td>Concentration</td>
</tr>
<tr>
<td>Blend 1</td>
<td>Blend 1</td>
<td>Blend 1</td>
</tr>
<tr>
<td>2 ounces of hemp seed oil</td>
<td>2 ounces of hemp seed oil</td>
<td>2 ounces of hemp seed oil</td>
</tr>
<tr>
<td>German Chamomile 60 drops</td>
<td>Bay Laurel 10 drops</td>
<td>Atlas Cedarwood 10 drops</td>
</tr>
<tr>
<td>Helichrysum 60 drops</td>
<td>White Camphor 6 drops</td>
<td>Ginger 5 drops</td>
</tr>
<tr>
<td></td>
<td>Sweet Birch 6 drops</td>
<td>Lemongrass 2 drops</td>
</tr>
<tr>
<td></td>
<td>Rosemary 5 drops</td>
<td>Lavender 10 drops</td>
</tr>
<tr>
<td></td>
<td>Lavender 9 drops</td>
<td>Thyme 3 drops</td>
</tr>
<tr>
<td>Blend 2</td>
<td>Blend 2</td>
<td>Blend 2</td>
</tr>
<tr>
<td>2 ounces of hemp seed oil</td>
<td>2 ounces of hemp seed oil</td>
<td>2 ounces of hemp seed oil</td>
</tr>
<tr>
<td>Lavender 32 drops</td>
<td>Sweet Marjoram 9 drops</td>
<td>Bay Laurel 10 drops</td>
</tr>
<tr>
<td>German Chamomile 9 drops</td>
<td>Turmeric 7 drops</td>
<td>Clove 2 drops</td>
</tr>
<tr>
<td>Helichrysum 9 drops</td>
<td>Eucalyptus 6 drops</td>
<td>Lemon 12 drops</td>
</tr>
<tr>
<td>Grapefruit 60 drops</td>
<td>Roman Chamomile 3 drops</td>
<td>Fir needle 6 drops</td>
</tr>
<tr>
<td>Sweet Birch 9 drops</td>
<td>Spike Lavender 11 drops</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 9-5** Application of fango for an acute or early sub-acute condition
SUB-ACUTE CONDITIONS

As the body progresses into the late phase of sub-acute inflammation, fango can be applied directly to the body area at warmer temperatures (98–104°F) for 20–30 minutes, either before or after the massage (Fig. 9-6). Once applied, it is covered with a moistened cloth and an insulating blanket. It is important to use rhythmic joint mobilizations at the end of the session to encourage collagen to re-orient itself along the lines of muscular stress. When an area is immobilized due to an injury there can be a significant increase in adhesion formation. Carrot seed essential oil is particularly useful with cross fiber friction techniques for decreasing adhesions and scar tissue.

CHRONIC CONDITIONS

In the chronic stages of inflammation, the treatment goal is to lengthen and strengthen the tissue to prevent further micro-tearing and irritation. Hot fango can also be used for osteoarthritis that is not in a flare up, chronic plantar fascitis, thoracic outlet syndrome caused by middle scalene or pectoralis minor tension and torticollis. A variety of massage techniques including deep tissue, myofacial release, muscle energy technique, PIR (Post Isometric Relaxation), AIS (Active Isolated Stretching) and many others can be used in combination with fango applications depending on the type of condition. For chronic conditions, the ability of fango to hold heat is particularly effective. It can be applied directly to the area in a half-inch to one-inch thick layer and left on for up to 30 minutes.

A full body fango application is indicated for fibromyalgia and chronic fatigue syndrome, but should only be given with a doctor’s release or an advanced understanding of these conditions. It is important to remember that a full body application may be contraindicated for weakened individuals. Follow the steps outlined in the cocoon procedure in chapter 7 (Body Wraps). If caution is required the fango should be applied at a temperature closer to body temperature (98–104°F rather than 104–115°F) and should not be left so long (15 minutes rather than 20 minutes).
## SAMPLE TREATMENTS

### Mindful Mud Cranium Care

**Promotional Description**

When was the last time you took care of your head? That’s right – your head! Every day the muscles of the scalp and face get a workout while we mull over the challenges in our day-to-day life. Over time tension builds up and the face and head feel tired and weary. Let your mind unwind while the neck, face and scalp are massaged with soothing aromatic oils. Let tension melt while warm mud is slathered over the head to release everyday worries and relax the entire body. Leave with a smile revitalized and invigorated by your well-cared for cranium!

**Treatment Outline**

Follow the steps for the fango scalp and neck treatment

<table>
<thead>
<tr>
<th>Scalp Oil Options:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brain Bliss</strong></td>
</tr>
<tr>
<td>One ounce sunflower oil, rosemary oil (1 drop), lavender oil (4 drops), grapefruit oil (6 drops), nutmeg oil (1 drop)</td>
</tr>
<tr>
<td><strong>Mindful Spirit</strong></td>
</tr>
<tr>
<td>One ounce of sunflower oil, frankincense (3 drops), sandalwood (4 drops), Jasmine (1 drop), sweet orange (4 drops)</td>
</tr>
<tr>
<td><strong>Psyche Connection</strong></td>
</tr>
<tr>
<td>One ounce of sunflower oil, neroli (2 drops), mandarin (6 drops), patchouli (1 drop), clary sage (3 drops).</td>
</tr>
<tr>
<td><strong>Clarity</strong></td>
</tr>
<tr>
<td>One ounce of sunflower oil, rosemary (3 drops), geranium (1 drop), lemon (5 drops), lavender (3 drops)</td>
</tr>
</tbody>
</table>

### Adobe Purification Ritual

**Promotional Description**

This specialized treatment inspired by Native American healing uses the rich red clay of Sedona. A stimulating exfoliation with blue corn and cactus cloth is followed by an application of the clay to the entire body. The clay draws impurities from the skin, soothes muscle tension and relaxes the spirit. Warm juniper oil is massaged into the body to complete this healing experience.

**Treatment Outline**

Follow the directions for a cocoon described in Chapter 7 (Body Wraps) and use Sedona clay/mud for the treatment product. A nice way to enhance this treatment after the wrap is to send the client to continue the detoxification process in a steam room or sauna utilizing pine or sage oil (sage sauna).

**In-House Product for the Adobe Purification Ritual**

<table>
<thead>
<tr>
<th><strong>Blue Corn Polish</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 cup ground blue corn, 1/4 cup plain moisture cream, 1 tbs. plain body wash.</td>
</tr>
<tr>
<td><strong>Juniper Massage Oil</strong></td>
</tr>
<tr>
<td>1 ounce of massage oil, juniper berry oil (6 drops), lavender oil (3 drops).</td>
</tr>
<tr>
<td><strong>Sage Sauna or Sage Steam</strong></td>
</tr>
<tr>
<td>2 cups of water, 2 drops of common sage (Salvia officinalis) 1 drop of rosemary. Throw the water on the heat source in the sauna or use this blend in the steam room. Do not place oils that have not been mixed in water on a heat source as they may burn or ‘pop’.</td>
</tr>
</tbody>
</table>
### Dead Sea Envelopment

**Promotional Description**

The Dead Sea region is a unique environment that yields a therapeutic mud famous throughout the world for its mineral laden healing properties. The body is buffed with Dead Sea salts and enveloped in warm mud to absorb nutrients essential to the body. Muscle tension melts as the skin is rinsed clean of impurities and rich creams are applied to seal in moisture.

**Treatment Outline**

Follow the directions for a cocoon described in chapter 7 (Body Wraps) and use Dead Sea mud as the treatment product. A variety of different support products can be used in this wrap. If the therapist wants to create a smell-scape or use plants indigenous to Israel, they can include products with olive, fig, citrus fruits and avocado.

### Moor Back Treatment

**Promotional Description**

Back pain can slow down your day and leave you feeling drained and irritable. This treatment using the healing peat from the Austrian Moors will bring relief from pain and revitalize the spirit. A 30 minute deep tissue massage and application of essential oils aimed at the muscular system completes this service.

**Treatment Outline**

Follow the steps for the Fango Back Treatment.

**Essential Oil Blends Ideas for the Moor Back Treatment**

**Body Balance Blend**
2 fluid ounces massage oil, essential oils of rosemary (4 drops), lavender (7 drops), lemongrass (2 drops), clary sage (5 drops) and mandarin (12 drops).

**Overworked Muscles**
2 ounces of massage oil (hemp seed oil is ideal), essential oils of bay laurel (8 drops), Eucalyptus (2 drops), Ginger CO₂ (1 drop), Lemon (10 drops), white camphor (4 drops - it must be white camphor, not yellow or brown), myrrh (5 drops).

**Burn Out Relief**
2 fluid ounces of massage oil, essential oils of geranium (2 drops), grapefruit (15 drops), lavender (7 drops), cypress (5 drops) and clove (1 drop).

### Sulfur Mud Pack

**Promotional Description**

Do you experience achy joints and chronic muscular pain? If the answer is yes then this healing treatment using the sulfur muds from Europe may bring some relief. In Europe mud is used to treat arthritis and muscle pain with remarkable results. The warm mud will be packed on areas of tension to warm the tissue and to bring its special healing properties to the body. Swedish and deep tissue massage techniques release tense muscles and calm the spirit.

**Treatment Outline**

The treatment outline will be based on the essential oils and fango temperatures that are most appropriate for the needs of the client. It is nice to have fango “processing” on one area while another is massaged.
Fangotherapy is the use of mud, peat, and clay for healing purposes. While fango treatments are mainly used for skin care in the USA, massage therapists will find fango useful for spa treatments aimed at the reduction of soft tissue pain and dysfunction, and to relax and revitalize the body.

The therapeutic substances used in fango spa treatments have different characteristics that affect their therapeutic properties and uses. Clay, which is mainly mineral (derived from rock), is the most absorbent of the fango substances. It is used to pull impurities from the skin and to stimulate circulation. Mud is also predominantly mineral but has small amounts of organic components that give it a wider range of properties. A mud may be anti-inflammatory, antiviral and immune boosting. Peat is therapeutically the most active substance of the three as it is mainly organic and derived from the break down of plant material over thousands of years.

**REFERENCES**


**REVIEW QUESTIONS**

**Multiple Choice**

1. _______ is a component of therapeutic mud, especially those that are obtained in the vicinity of volcanoes and hot springs.
   a. Mucilage
   b. Fango
   c. Sea salt
   d. Sulfur

2. Fango is the Italian word for _______
   a. Seaweed
   b. A body wrap
   c. Relaxation by a mineral spring
   d. Mud

3. When a mud is ‘matured’ it is
   a. Processed to develop nonpathogenic microorganisms that make the mud more therapeutic.
   b. Aged to make the mud smell more pleasing
   c. Dried or dehydrated to kill any pathogenic microorganisms
   d. Mixed with fresh plants to increase the range of chemicals

4. In Europe, fangotherapy is regularly used in the treatment of
   a. Cancer
   b. Aids
   c. Arthritis
   d. Meningitis

5. Therapeutic peat falls into two main commercial categories. These are
   a. Mainly black and mainly brown
   b. Mainly mineral and mainly organic
   c. High moor or dead sea
   d. High moor or low moor

6. In Europe, fango is applied to the body at this temperature, even in cases of acute inflammation.
   a. 56–66°F
   b. 24–32°F
   c. 78–89°F
   d. 104–115°F
**Fill in the Blank**

7. Full body fango applications can last between _______ and _______ minutes.

8. When viewed under electron microscope, clay particles are about _______ times longer than they are ________.

9. Kaolinite clay is generally _______ in color and was first mined in China.

10. At the Piestany spa in Slovakia the mud turns from brown to black when it is ________________.