As promised, we are going to discuss the best mesotherapy methods and “cocktails.”

This condition is caused by excessive growth of fat pads under the lower eyelids. It affects almost everyone after the age of 50 and responds well to mesotherapy. Factors such as gender, age and ethnicity do not influence the treatment outcome. What really matters is the formulation of drugs used and the technique.

We’ll begin by reviewing lower eyelid eyepads.

The injection technique involves a perpendicular injection into the eye pad with a 3/4- inch (or similar length) 30-gauge needle. You may inject it all with one injection or deliver the formulation via 2 separate injections.

I personally prefer a less flexible, higher gauge needle. It is essential not to enter the eyeball. Too flexible of a needle may self direct toward the eye. If the eyeball is injected, it will result in the loss of the eye. Unfortunately, some doctors are providing instruction on how to inject eye pads with the needle directed straight toward and under the eye. Do not use that technique.

This is the wrong way to do this procedure and it is very dangerous.

Now we’ll discuss the drug formulation for the procedure. Everyone uses the same drugs but the composition may vary depending on the phosphatidylcholine / sodium deoxycholate (PC/DC) quantity used.

Recent research carried out in the United States showed that DC is the main chemical responsible for dissolving fat. For that reason, some might suggest using only DC in this procedure. However, injecting only DC is very painful for the patient. Therefore, I recommend using a PC/DC mixture that is readily available from any compounding pharmacy. The amount of DC in any strength PC solution is the same so use the lowest strength PC solution. I use 50 mg PC/1 cc.

Now we will prepare our mixture or “cocktail.” I recommend using a mixture of 1 cc of PC 50 mg/1cc plus 1 cc 2% lidocaine. Inject 50% of the mixture on each side using a lateral approach. First, insert the needle then start slowly injecting while gradually withdrawing the needle.
Some clinicians recommend adding 1 cc (25 mg/1 cc) of aminophylline to the cocktail. What I like to do is replace lidocaine with 2% procaine. One word of caution, however—before using procaine, perform an allergy test. With a tuberculin or insulin syringe, inject a small amount of procaine via intradermal injection then send the patient home. If within 3 or 4 days, there is no skin reaction, swelling, itching, skin rash or any other symptom of a drug allergy, you can use procaine for the treatment.

In my opinion, Procaine is more effective than lidocaine. It has many unique properties that have been intensely studied all over the world. You can replace lidocaine with procaine as long as there is no allergy issue.

If an additional treatment is required, wait another 5 to 6 weeks before performing the procedure. Advise the patient to wear dark glasses for 1 to 2 weeks after the procedure. Expect swelling and bruising and advise the patient accordingly.

Patients must be advised not to take aspirin or any other medications affecting coagulation or bleeding time for 2 weeks prior to treatment. That does not mean you cannot perform treatment in people taking those medications. But if you do, you can expect more swelling and bruising.

Excessive swelling can be controlled by using prednisone in a sliding-scale manner. Perform the procedure on day 2 of the prednisone treatment. Start with 40 mg, then lower the dose by 10 mg every day until reaching 10 mg. Then finish by using 5, then 2.5 mg. (see the attached table). Using prednisone has its own proponents and opponents. Consider carefully patient’s medical condition before using it.

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Prednisone (mg)</td>
<td>40 mg</td>
<td>30 mg</td>
<td>20 mg</td>
<td>10 mg</td>
<td>5 mg</td>
<td>2.5 mg</td>
</tr>
</tbody>
</table>

If you use the technique described here, please share your experience with us. Send us your “before” and “after” pictures and a description of the procedure.

Footnote:
*PC is phosphatidylcholine. DC is sodium deoxycholate.

References
24. Womack MD, Kendall DA, MacDonald RC. Detergent effects on