Introduction

Aesthetic surgery of the face using fillers is very popular due to its simple procedure. Most of them have no problem but if fillers occlude blood vessels, that could cause serious trouble. The author intends to report the treatment experience of patients.

Methods

We conducted retrospective analysis with eleven patients who had visited hospitals showing abnormal findings after having fillers inserted into their noses through charts and review of photographs. Imaging, angiography and biopsy were added, if necessary.

Results

<table>
<thead>
<tr>
<th>Filler injection site</th>
<th>Treatment</th>
<th>Case1</th>
<th>Case2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Observation</td>
<td>After injection</td>
<td>After injection</td>
</tr>
<tr>
<td>Nasolabial fold</td>
<td>Medical treatment</td>
<td>After 3 months (Observation)</td>
<td>After 6 months (medical treatment)</td>
</tr>
<tr>
<td>Tip + Nasolabial fold</td>
<td>Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Reconstruction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treatment protocol

- Discontinue injection immediately
- Gently massage the affected area
- Apply hot/warm water on a gauze
- Apply nitroglycerine paste
- If using hyaluronic acid gel, inject hyaluronidase (Lee Pharmacy, Inc., Fort Smith, Ariz; 50U/cc)
- Use low molecular weight heparin
- Diligent wound care and observation
- Treatment of resulting scar
  - Options include silicone pads, Duoderm Ultra Thin (Convatec, NJ), and intralesional steroid injection (use with caution as you are injecting into the glabella)
  - We suggest waiting at least 3 months after the eschar resolves to allow the scar to mature before implementing dermabrasion, surgical excision, pulse dye laser, 1450-nm diode laser, or carbon dioxide laser resurfacing.
- Operation
  - Prevention point
    - Aspirate before injecting
    - Inject superficially and medially
    - Avoid overcorrection by using low volumes in two or more treatment sessions (rather than one high volume session)

Conclusions

Filler, despite its proven stability, can cause serious complications if problems arose in blood vessels during the injection procedure. As the number of aesthetic surgery using fillers increases, so will its side effects. Therefore, from the perspective of prevention and treatment, attention needs to be drawn to those problems.