## 6. Troubleshooting

To avoid problems during infusion it is very important to inspect carefully the area before needle insertion. Look for nodules in subcutaneous tissue, oedema (SCIG), haematoma, fibrosed veins (IVIG) or irritated skin/rash. Please also check the tables on adverse event management (Appendix 4 and 5).
The in the following table the following format is used: "what to check**:** how to act".

In SCIG therapy most local problems after the first 8–10 infusions are caused by the use of too short needles.

| Problem | IVIG | SCIG | *f*SCIG |
|---|---|---|---|
| Leaky site | • Needle: correct position<br>• Connections: tighten<br>• Fixation: secure dressing/ tape/bandage<br>• Integrity of equipment | • Needle: correct position, length, diameter<br>• Connections: tighten<br>• Fixation: secure dressing/ tape/bandage<br>• Volume: decrease per site<br>• Infusion rate: slow down<br>• Integrity of equipment | • Needle: correct position, length, diameter<br>• Connections: tighten<br>• Fixation: secure dressing/ tape/bandage<br>• Volume: decrease per site<br>• Infusion rate: slow down<br>• Integrity of equipment |
| Discomfort/pain at infusion site | • Needle: correct position<br>• Fixation: secure dressing/ tape/bandage<br>• Extravasation: start over | • Needle: dry needle insertion. Needle too short or too long? Movement of needle? Change type, brand and/or length of needle<br>• Fixation: secure dressing/ tape/bandage<br>If you can't resolve the problem, remove needle and start again with a new needle/location | • Needle: dry needle insertion. Needle too short or too long? Movement of needle? Change type, brand and/or length of needle<br>• Fixation: secure dressing/ tape/bandage<br>• Volume: decrease per site |
| Blood at the infusion site or in the line, before starting the infusion | • This is normal, you are in the correct position | • Blood at the site only (none in the line): proceed to infusion<br>• Blood in the line: remove the needle and start again with a new needle in a new location. In case of multi-site lines, you may clamp the site, which has blood in the line, | • Blood (even small amounts) at puncture site or in the line: remove the needle and start again with a new needle in a new location (there might be a risk of severe haematoma due to the |

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|---|---|---|---|
| | | and infuse through the remaining ports if you consider the change of volume per site will not be a problem | hyaluronidase) |
| Local reactions (swelling, redness, induration, itching, burning) | • Needle: correct position<br>• Connections: tighten<br>• Fixation: secure dressing/ tape/bandage<br>• Integrity of equipment: replace if necessary<br>• Allergies to any used products: change equipment, anti-histamine can be given, inform a doctor | • Infusion site: inform the patient that local reactions are expected after the first 8–10 infusions and usually resolve between 12 and 72 hours<br>• Volume: decrease per site<br>• Infusion rate: slow down | • Infusion site: inform the patient that local reactions are expected and usually resolve between 12 and 72 hours<br>• Volume: decrease per site<br>• Infusion rate: slow down |