



General

Goal: *Maintain* adequate IgG levels to prevent infections and to minimize the infusion time.

Solution: *Adjust* dose and infusion rate to current weight of patient. *Ensure* adequate pre infusion IgG level at next infusion.

Goal: *Facilitate* treatment for patients.

Solution: *Develop* a treatment schedule with patients considering work and school issues.

Goal: *Provide* ongoing education to patients regarding their treatment and disease.

Solution: *Assess* patient/family understanding of disease and treatment. *Facilitate* communication of information to work/school as necessary (ie. letter to notify work/school of infusion days, vaccine information). *Ensure* children receive developmentally appropriate ongoing information. *Refer* for genetic counselling as children transition to adulthood.

Goal: *Minimize* nonadherence to treatment.

Solution: *Explore* barriers to treatment with patient and/or family.

Goal: *Minimize* wastage of IGIV/SCIG products.

Solution: *Suggest* rounding of doses to the closest vial size.

IGIV Infusions: (Intravenous Immunoglobulin)

Goal: *Facilitate* IV access.

Solution: *Improve* blood flow to veins by ensuring patients are well hydrated prior to start of IV and warming access sites.

Goal: *Manage* reactions to IGIV products.

Solution: *Assess* patient's history of IGIV infusions at each infusion and *develop* a plan to manage reactions with the ordering physician. Suggestions for managing reactions include pre-treatment Hydrocortisone or Benadryl and regular dosing of non-steroidal antiinflammatory medications until patient is symptom free post infusion (may be up to 5-7 days). Good hydration pre and post infusion for 1-2 days also helps minimize headaches. *Ensure* reactions are reported to your Transfusion Medicine Department and *develop* a plan to manage potential future reactions.

Goal: *Avoid* bubbles in IGIV infusion lines.

Solution: *Allow* the IGIV to come to room temperature; *prime* the IV lines with D5W or a compatible IV solution; do not *shake* the IGIV, *spike* the tubing on a flat surface at a 90° angle through the centre circle on the stopper.

SCIG Infusions: (Subcutaneous Immunoglobulin)

Goal: *Identify* patients who may benefit from SCIG therapy.

Solution: *Consider* in patients with poor venous access, and in patients with reactions to IGIV, as SCIG may have less significant systemic reactions. *Consider* social factors such as patient desire for independence and those who want the control that home infusion allows or wish to travel for extended periods of time. *Remember* modality of treatment should be patient choice for success of treatment.

Goal: *Assess* frequency of infections in patients. *Ensure* that there is no increased rate of infections when patients are switched from IGIV to SCIG.

Solution: *Monitor* IgG levels. Remember that the pharmacokinetics are different on SCIG and that there is not a direct comparison of IGIV trough levels to SCIG steady state levels. Serum IgG levels obtained with SCIG may be higher over time and it is important to monitor infections prior to adjusting doses. *Allow* time for steady state IgG levels to be reached prior to adjusting doses (approximately 3 months). *Suggest* reassessment of treatment plan if increased infections occur.

Goal: *Develop* treatment plans for patients that allow for independent infusions at home.

Solution: *Prepare* patient information tools for managing SCIG treatment. *Include* teaching plans outlining the individual home infusion plan including: number of sites/infusion, number of infusions/week, volume/site, site locations, preparation and storage of SCIG product, aseptic technique and how to prepare the skin, insert and remove the needles, how to prepare the pump (if using) and how to dispose of supplies.

Goal: *Ensure* patients are clear as to what their responsibilities are while on SCIG therapy.

Solution: *Develop* written protocols for patients outlining their responsibilities while on SCIG treatment including: how to order the SCIG product and supplies. Coverage of supplies will vary across the country and some patients will have private insurance that may cover the costs. *Teach* how to record lot numbers of SCIG. *Develop* a plan for reporting of reactions.

Goal: *Manage* reactions to SCIG.

Solution: *Assess* frequency and type of reactions at every patient contact. *Remember* that while site reactions are common, patients may also experience systemic reactions similar to IGIV. This type of reaction should be *assessed* by the ordering physician and the option of the current brand of SCIG treatment should be re-evaluated, or *consideration* should be given to switching brands or ordering premedication prior to infusion. *Minimize* site reactions by instructing patients to reduce itching by the use of topical antihistamines or ice. *Report* all systemic reactions to your transfusion medicine department and ordering physician. *Monitor* site reactions and *consider* reassessment by physician if worsening of site reactions or patient tolerability to infusion.

Goal: *Reduce* pain with SCIG infusions.

Solution: *Consider* use of topical anaesthetics or ice prior to needle insertion. *Recommend* that patient pinch an inch of skin, and avoid injecting into bruises, stretch marks or scars. *Avoid* sites that individuals find uncomfortable. *Push* infusions should not be too rapid. *Assess* length of the needle to ensure that it is not too long. *Ensure* that SCIG is room temperature prior to infusion.

Goal: *Regular* clinic follow-up by the prescribing Immunologist/physician to ensure optimal patient well-being.

Solution: *Include* follow-up appointment schedule in initial teaching. *Assess* timing of last follow-up appointment each time more product and supplies are ordered. *Continuously* assess compliance to treatment plan.

Goal: *Problem* free home infusions.

Solution: *Encourage* patients to prepare all their supplies and vials in a box for the week. *Develop* a system for ensuring that SCIG dispensed to the home does not expire. *Develop* a routine time and place of infusion in a relaxing environment. *Identify* an infusion buddy.

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