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REDUCING INCIDENCES OF LOCAL INFUSION SITE REACTIONS

in subcutaneous immunoglobulin patients through **enhanced patient education** with a focus on **"dry" versus "wet"** priming technique.

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BACKGROUND

FOR THE PAST TWO YEARS our organization observed a correlation between patients who were experiencing painful, itching or warm local site reactions during subcutaneous immunoglobulin (SCIG) therapy and those who prime their needle sets completely, inserting a "wet" needle through their skin.

SIMILAR OBSERVATIONS HAD BEEN REPORTED at the 2012 AAAAI Conference in the Clinical Management Workshop on IVIG vs. SCIG. Industry experts believe that the tracking of the IgG antibodies through the dermis triggers mast cell production, leading to localized reactions.

WHILE ONLY ANECDOTAL REPORTS HAVE BEEN PUBLISHED to date regarding this practice, an SCIG manufacturer includes instructions for dry needle placement in their clinician troubleshooting resource materials.

AGE RANGE	AVG. TIME ON 20%	AVG. NEEDLE LENGTH
8–64 years	27.5 months	9 mm

PURPOSE

THE PURPOSE OF THIS PROJECT WAS TO DETERMINE if education regarding dry priming of infusion needle sets reduced the incidence of local site reactions during the administration of subcutaneous immunoglobulin infusions.

METHODS

41 PATIENTS WERE INITIALLY INCLUDED in this study on SCIG 20%. Cohort evaluation occurred from 8/2012 – 8/2013.

ALL PATIENTS WERE PREVIOUSLY EXPOSED to SCIG 20% and assessed via an internally developed tool. If the initial data collection revealed self-reported localized reactions and prior training including a wet needle technique, patients were placed on study.

PATIENTS WERE ELIMINATED IN THE EVENT that any of the following needed immediate changing: needle length, brand of set or angle of needle insertion.

Study cohort: n=36

TELEPHONIC RETRAINING occurred for 1-3 doses. Nursing visits to retrain patients occurred as clinical determined needed.

SUBSEQUENT TELEPHONIC ASSESSMENTS were conducted by clinical staff trained on the assessment tool every 28-30 days, to evaluate the current level of site reaction and infusion technique.

THE DATA COLLECTION TOOL was used with each interaction and included a rating of tissue reaction (descriptive rating scale), technique for insertion of needles and patient satisfaction.

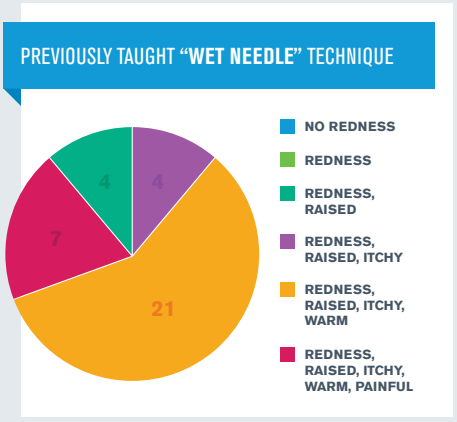
MINIMUM VOLUME/SITE/HOUR
4 ml
MAXIMUM VOLUME/SITE/HOUR
27 ml

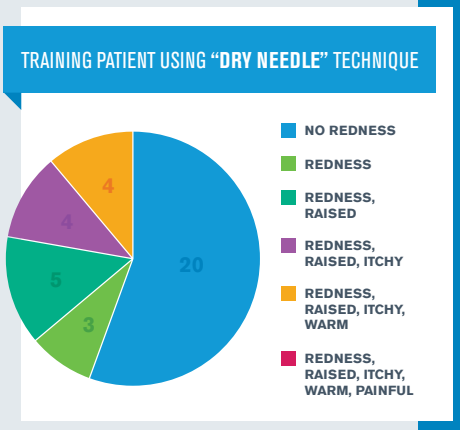
MINIMUM INFUSION TIME
45 minutes
MAXIMUM INFUSION TIME
6 hours

RESULTS

OF 36 PATIENTS UTILIZING WET NEEDLE PLACEMENT during the setup of SCIG 20% concentration, 77% (n=28) reported either complete resolution or decrease in size or severity of local site reactions following a nursing visit or telephonic training on dry-priming technique.

PATIENTS WERE THEIR OWN CONTROL and continued using same brand of needle sets with no change in number of needles or length during this process.





CONCLUSION

THIS ORGANIZATION FOUND that patients with existing local site reactions had a decrease or elimination of reactions once retrained to insert a "dry" needle. These findings were similar to anecdotal reports discussed at AAAAI in 2012. Based on findings using this data tool, this organization has been able to assess tolerance and initiate retraining where needed.

FUTURE RESEARCH WILL INCLUDE assessing our entire SCIG patient population and collecting additional data on volume per needle/site to compare differences in local infusion reactions related to number of needle sites and concentration of SCIG.

Current protocol or dry needle training on naïve patients continues.

Disclosure: This panel has nothing to disclose.