

South Australian Experience with Subcutaneous (SC) Immunoglobulin (Ig) Replacement (SCIg)

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Background

- The vast majority of replacement immunoglobulin in Australia is given IV
- In UK and Sweden respectively around 50% and >90% is given SC
- Motives for examining SC Ig included patient convenience and as one means of relieving pressure on ambulatory day centres (along with parallel program for home IVIg)



Pros and Cons of SCIg and IVIg

- Both high safety and efficacy
- SCIg;
 - higher “trough” IgG levels in some subjects
 - minimises adverse reactions/risks relating to bolus effect of IVIg
 - suit home environment without RN attendance
- IVIg
 - lower frequency of administration
 - greater ease in giving higher doses
 - (currently greater efficiency in Ig production)



Current SA SClg Recipients

- 13 subjects aged 11-71 years, 5 males, 1 child
- 11 converted from IVIg to SClg, 1 has only received SClg, 1 has moved from IVIg to SClg to IVIg to SClg to IVIg
- All but one adult receive 16- 26 g monthly, requiring no more than two SClg infusions per week. One adult receiving 42g /month via trice weekly infusions.



Reasons for Initiating SClg in This Selected Population

- Patient/family convenience - 8 subjects
- Access problems with IVIg - 2 subjects
- Systemic adverse reacts IVIg- 6 subjects
- Inadequate control of infection- 2 subjects



Adverse Reactions Associated with IVIg in Six Subjects Transferring to SCIg

Chills, nausea, vomiting – 2 subjects

Severe urticaria – 1 subject

Headaches, non-specific malaise – 2 subjects

Febrile reaction -1 subject



Expressed Preferences of Subjects Transferred to SClg

EXPERIENCE	FAVOURED ROUTE (number of subjects)	
	SClg	IVlg
Convenience	5	2
Adverse reactions	6	0
Reduced infections	3	1 -> 0



Effect of Change from IVIg to SCIg on Dose of Ig

- All SA replacement Ig recipients monitored regularly for efficacy and side effects
- Adequate data available on 10 adult patients
- Monthly dose on SCIg vs IVIg
 - Higher on SCIg - 1 subject
 - Lower on SCIg - 5 subjects
 - Unchanged - 4 subjects



Limits on Applicability of SCIg in SA

- Lack of staff time for training subjects
- Lack of adequate funding for suitable pumps or “Springfusor” devices plus consumables
- Difficulty with present Ig preparations in providing adequate doses at low frequency for subjects on therapeutic Ig



Conclusions

- This is a selected population likely to carry a bias toward SCIg
- There are difficulties in implementing SCIg with current funding but there is recent favourable change
- SCIg offers significant advantages in reducing hospital utilisation/costs **and for selected subjects in greater convenience and fewer adverse reactions**

