


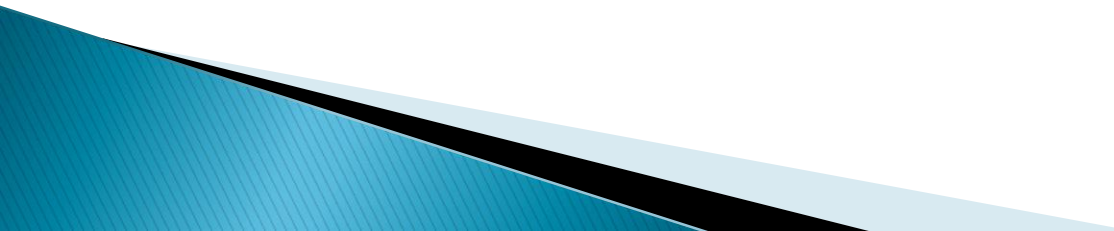
‘Audit of local anaesthetic in people with inherited coagulation disorders’

Louise Madden & Laura Parkinson RDN
Supervisor: Dr Alison Dougall
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Aims

- ▶ New guidance published by United Kingdom Haemophilia Centre Doctors' Organisation Dental Working Party (UKHCDO) to support variable need for haemostatic cover. (*BDJ 2013*)
 - ▶ Inform future practice in the absence of sufficient evidence base
 - ▶ Assess the current clinical practice in two collaborative centres – Dublin and Melbourne
 - ▶ To support our practice of shared care.
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Benchmark

- ▶ Audit of an Irish protocol for the management of patients with hereditary bleeding disorders undergoing dental treatment. (*Freedman and Dougall, Journal of Disability and Oral Health 2009*)
 - ▶ World Federation of Haemophilia (WFH) Guidelines for dental treatment of patients with inherited coagulation disorders. (*Brewer et al. 2008*)
 - ▶ Techniques for local anaesthetic administration in people with bleeding disorders 'Medical Problems in Dentistry' (*Scully and Carwson*)
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Method

- ▶ Anonymous prospective data collection electronically in 2 centres
- ▶ All consecutive patients receiving buccal infiltrations
 - Medical team and operator confirmed patient had no additional systemic measures prior to dental treatment
 - Materials were all in date and single use
 - LA technique observed and confirmed
 - Fine gauge needle , single use, presence of adrenaline, slow delivery of injection
- ▶ Age, weight, severity and type of bleeding disorder were recorded
- ▶ Injection site was examined 1 and 2 minutes post LA administration to confirm presence or absence of bleeding/haematoma
- ▶ Patient advised to report adverse incidents of bleeding or haematoma within 48 hours post-operatively to medical team (normal practice)

Results

Data collected from two centres between July 2014 and April 2015

Centres	Responses	Number of patients
Dublin	62.72%	37
Melbourne	37.28%	22
Total	100.00%	59

All patients audited had a coagulation disorder as shown below

	Severe (<1%)	Moderate (1-5%)	Mild (5-30%)	Borderline (>30%)	Total
Haemophilia A	8	6	14	1	29
Haemophilia B	4	1	7	2	14
VWD Type 1	0	0	8	0	8
VWD Type 2	0	0	3	0	3
VWD Type 3	2	0	0	0	2
Other	3	0	0	0	3

Benchmark/ Standard	Yes	NO	Total
27 gauge sharp needle or finer	100% 59	0% 0	59
Delivery of injection >30 seconds	100% 59	0% 0	59
Presence of adrenaline or other vasoconstrictor	98.3% 58	1.69% 1	59
Bleeding from site at 1 minute	0% 0	100% 59	59
Bleeding from site at 2 minutes	0% 0	100% 59	59
Haematoma from site at 1 minute	0% 0	100% 59	59
Haematoma from site at 2 minutes	0% 0	100% 59	59

48 hours post-operatively there remained 100% record of no bleeding or haematoma.

Discussion

1. Do no harm?
2. Poor evidence base - There are no haemostatic measures required for vaccines or routine blood tests so why dental infiltrations?
3. Insisting on haemostatic cover adds barriers to patients, ie;
Plasma derived products carry a risk of co-infection
 - Patients receiving these products are at risk at developing inhibitors to the product – especially high doses first 7 times
 - Certain haemostatic cover is contra indicated for patients over the age of 65.
 - Patients have to travel to Dublin – distances to receive factor
 - Poor access to care
 - Dentists confused
 - Treatment with no LA

Recommendations

- No change to current practice required (100% meeting of standard for no bleeding outcome following buccal infiltrations)
- There is no need to start providing additional systemic factor cover for the administration of dental buccal infiltrations given according to the standards
- Cost - Estimated cost for haemostatic treatment for those patients included in the audit €114,312

Action Plan

Haemophilia and Dental Care



Produced by:
The Dental Department,
National Centre for Hereditary Coagulation Disorders,
St. James's Hospital,
Dublin 8.
Tel: 01 4162141

and

The Irish Haemophilia Society,
First Floor Cathedral Court,
New Street,
Dublin 8.
Tel: 01 6579900
Email: info@haemophilia.ie
Website: www.haemophilia.ie



- Audit shared with OLHSC Crumlin
- audit paediatric patients
- Extra LA guidance in shared care letters to dental practitioners
- Add specific instructions on LA technique to the dental leaflet produced by Irish Haemophilia Society next time reprinted
- Continue to collect data and publish this audit in journal of haemophilia to add to the evidence base