Spleen Registry

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Special Interest Group – Registries

Monash Department of Epidemiology & Preventive Medicine

21 November 2014

Overview

1. Background
2. Burden of disease
3. Establishment
4. Funding/Fundraising
5. Process
6. Website
7. Registrants
8. Governance/Legal
9. Collaborations
10. Achievements
Spleen

LOCATED

Left upper quadrant of the abdomen behind ribs
Functions of the spleen

1. **BLOOD**
   - Clears erythrocytes & metabolises haemoglobin
   - Reservoir of blood for haemorrhagic shock

2. **IMMUNE SYSTEM**
   - Synthesizes macrophages - engulf bacteria
   - Reservoir for half of the body's monocytes

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Identifying asplenic/hyposplenic patients

1. History of operation (scar)
2. FBE & film - Howell-Jolly Bodies +ve

![Wrights x1000](image-url)
**Overwhelming Post Splenectomy Infection (OPSI)**

**Risk difficult to quantify**
- Estimates 3-5% lifetime risk *
- 38-50% mortality *
- Incidence 0.2-0.5% per year *

- Risk is considered high in first 2 years
- Case reports OPSI up to 30 yrs post splenectomy
- *S.pneumoniae* 50-90% of infections

* Clin Micro Infect 2001 7 65

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**OPSI – still occurring**

Best practice preventive strategies are known

**BUT**

- Advice not given
- Advice forgotten
- Quality of advice varies
Background OPSI

Risk of sepsis after splenectomy varies

- Age – young more at risk
- Indication splenectomy (trauma v malignancies)
- Underlying medical conditions
- Lack of knowledge (of infection risk)

Encapsulated organisms

Pneumococcal & Meningococcal

*Streptococcus Pneumoniae* - EM

Blood film *Neisseria meningitidis*

Others – *Haemophilus Influenzae*

*Group B streptococcus*

*Capnocytophaga canimorsus*
**Capnocytophaga Canimorsus**

**Dog-bite victim’s medical shock**

*By HEATHER LOW CHRY*

**PEOPLE often ask recent quadruple amputee Yorke Mountford what happened.**

“When I say I got bitten by a dog they don’t believe me. They think I’m joking,” he said.

The Eildon Vale daredevil, who used to climb electricity towers for a living and ride motorbikes for fun, can’t quite believe it himself.

“My family always worried I’d fall off a tower or come off the bike. Turns out towers and motorbikes were safer than going to a barbecue,” Mr Mountford said.

The 46-year-old lost both legs and hands as a result of illness caused by a nip from a dog at a backyard barbecue on the Tasman Peninsula on March 8.

“It was a tiny little scratch on my thumb. Just a nip. There was no blood drawn. It was not worth the trouble, but here I am.”

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**Splenectomies**

![Bar chart showing splenectomy rates](chart.png)

- **2009 – 2010 splenectomy rate** 250 per annum (public and private)
- **Asplenia & Hyposplenism**
  - ~ 4,000 people in Victoria
  - ~ 20,000 people in Australia

**“Embolisation effect”**
Establishment – Spleen Registry

* Denis Spelman
* Demonstrate the need
* Clinical registry - ongoing patient contact
* Discussions (John McNeil) - model
* $s
* 2003 - Spelman et al received DHS funding
  ✓ $66,000 for 18 months
  ✓ 1st patient enrolled 23/10/2003

✓ 2007 - Statewide public health initiative

VSR: Severe sepsis/OPSI Prevention – Strategies (EVA)

• **Education**
  Signs & symptoms of bacterial infection
  Alert cards
  Travel, animal bites, ticks, educate GPs
  Other – pregnancy/breastfeeding, OCP or HRT
  translated documents

• **Vaccinations** (Immunisation Handbook 10th Edn)
  pneumococcus
  meningococcus
  *Haemophilus Influenzae* type b
  annual influenza

• **Antibiotics** (Antibiotic Guidelines)
  Prophylaxis – penicillin (roxithromycin)
  Emergency supply – 3gm sachet amoxicillin
SPLEEN REGISTRY
N > 4000 patients
Staff Expertise in
- Immunology
- Infectious Diseases
- Haematology
- Epidemiology
- Vaccinology
- Pharmacology

Education
- Risks
- Travel
- Animals
- Strategies

Research
(i) Cost effectiveness (ii) Splenic Embolisations follow up (iii) IgM memory B cells

Follow Up
- Reminders
- Update GPs
- Newsletters
- New vaccine protocols

Prevention
- Vaccines
- Antibiotics
- Medialert
- Emergency

FUNDING HISTORY

Department of Health
1. 2002 Unsuccessful
2. 2003 Department of Human Services $66K
3. 2007 Statewide $100K
4. 2012 $40K per annum 3 year period up
5. 2014 $100K per annum 3 years - 1/7/16

Additional
- Alfred hospital
- Research studies
  - NHMRC – pneumococcal vaccine study
  - IgM mem B cell test

Fundraising
1. Jimeoin – 2006 - $10K
2. Cricket match at MCG - $4,000

Grants
- Alfred Foundation – website X2
- App
Staffing – 1.5 EFT

Manager       P Jones (0.6)

Spleen Educators / Nurses
Julia McNamara & Nigel Pratt

PAPI Study       Nigel & Clinical Research Nurse

Monash IT Web Database

Volunteer       Kat Phillips

Medical
Denis Spelman, Ian Woolley, Allen Cheng, Michelle Giles

Pharmaceutical Louise Grannell

Grant to develop the website

www.spleen.org.au

Built to manage >20,000 people
ON-LINE process preferred

**Paper version** (faxed, emailed)

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**Ascertainment of cases**

No mandatory reporting — what would it take?

- **a)** Opt out - ethics approval for sites
  - RMH, St V’s & Austin (pathologists)

- **b)** Medical referrals (specialists, GPs)

- **c)** Medical records reviews

- **d)** Opportunistic (in hosp for something else)

- **e)** Self referrals (well known & high satisfaction)
Measures of ascertainment

• Prospective
  newly splenectomised only (50:50)

• Retrospective 😞
  DoH restrictions on disclosure (Privacy)

• Capture rate - estimate
  ★ Med record review (Alfred/RMH)
  ★ Annual numbers of registered people
  ★ DoH annual figures - ~85% (2013)

Minimum data-set

Name
DOB
Gender
Address
Contact phone numbers
Email
Next of kin
Medicare
GP details
Date of splenectomy/diagnosis of hyposplenism
Medical history (chemo)
Allergies - vaccines/antibiotics
Infection/Thrombosis information
Vaccination history
Date education & DVD sent
REASON FOR SPLENECTOMY CODES

1. Trauma - MCA, violent event – not surgical mishap

2. Blood or spleen problem (Haem disorders)
   - ITP, H. Spherocytosis, Thalassaemia, Auto Immune Haem Anaemia
   - Sickle cell anaemia, Gauchers, any thrombocytopenias

3. Blood cancer (Haem malignancies)
   - Leukaemias, Lymphomas (Hodgkin & NHL & CLL), Myelofibrosis

4. Cancer (anything related to condition at time of operation – eg. spleen attached to tumour)
   - GIST (gastrointestinal stromal tumor), Bowel
   - Pancreatic, Renal (can be removed at time of nephrectomy)
   - Pseudomyxoma peritonei (PMP)
   - NET Neuroendocrine (Carcinoid) tumours
   - MEN1 - Multiple endocrine neoplasia type 1 (insulinoma)

5. Not planned (Incidental)
   - Occurred at time of “another operation” or procedure

6. Non-working spleen (Hyposplenic HJB +ve)
   - Congenital asplenia
   - Coeliac, Rheumatoid arthritis
   - Splenic infarctions

7. Other
   - ALL Pancreatic disorders (pancreatitis, pancreatic cysts etc)
   - Spontaneous Rupture, Hydatid, Cysts/tumours (benign)
   - Infections: Malaria, Abscess
   - SLE, Splenic artery ligation, Splenomegaly, Unknown/cannot remember

VSR recommendations (page 1) UPDATED ANNUALLY

Victorian Spleen Service (VSS) incorporating the Victorian Spleen Registry

Recommendations for the prevention of infection in ASPLENIC/HYPOSPLENIC patients

Applicable for patients over 15 years of age – (FEBRUARY 2014)

If the patient has previously received vaccinations, see separate VSS recommendations

"Give 1st dose 7 – 14 days prior to splenectomy (elective) or at least 7 days after splenectomy (emergency) and verbal consent should be obtained prior to administration of vaccines"

For more information on 

8 & 9 please refer to page 3 of this document.
VSR recommendations (page 2)

Recommendations for the prevention of infection in ASPLENCHYMOPHAGOCYTIC patients

Who have received some vaccines in the past - applicable for patients over 18 years of age

***Give 1st dose 7 - 14 days prior to splenectomy.php or at least 7 days after splenectomy (emergency)***

and refer consent should be obtained prior to administration of vaccines ***

<table>
<thead>
<tr>
<th>Disease prevented</th>
<th>Vaccines received in past</th>
<th>Follow up vaccines</th>
<th>Revaccinations</th>
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</thead>
<tbody>
<tr>
<td>Pneumococcus</td>
<td>Polysaccharide (Pneumovax 23) &gt; 1 year</td>
<td>Conjugate @ (Prevent 13V)</td>
<td>Polysaccharide # (Pneumovax 23) 0.5ml IM or SC</td>
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<td>Conjugate @ (Prevent 13V)</td>
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<td>Conjugate ACWY (Menveo, Menactra) 6 years</td>
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<td>Conjugate C (Prevent C, Menactra, Menjugate) 6 weeks</td>
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<td></td>
<td>Conjugate ACWY (Menveo, Menactra) 6 years</td>
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<tr>
<td></td>
<td>Polysaccharide acm (Menaxim, Meningrix) &gt; 3 years</td>
<td>Conjugate ACWY (Menveo, Menactra) 6 years</td>
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<tr>
<td></td>
<td>HIV (Eradix, Paludisol D, HIVac)</td>
<td>Only one vaccine required</td>
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<td>Meningococcus</td>
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<td>Influenza</td>
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*See tab in bottom*

*Only one vaccine required*

@ 3 & 6 please refer to page 3

Vaccines given by Service (VSS) Recommendations for the prevention of infection in asplenic, splenectomized or hypoplastic patients over 18 years of age (VSS) February 2014. Derived from Immunisation Handbook 12th edition, 2013. VSS is based at The Alfred hospital, Melbourne. Website: vss.org.au or email vssinfo@alfred.org.au F: (03) 9276 3428 F: (03) 9276 3351 2 of 3 pages

VSR recommendations (page 3)

<table>
<thead>
<tr>
<th>Antibiotic Prophylaxis</th>
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<tbody>
<tr>
<td>1. Oral amoxicillin 250-500 mg once daily OR penicillin V 250-500 mg twice daily</td>
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<td>2. Penicillin allergy - macrolides 100 mg once daily or erythromycin 200 mg once daily</td>
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<tr>
<td>3. Duration - Immunocompromised patients - lifelong, otherwise healthy patients - recommended daily antibiotics for a minimum of two years, or lifelong</td>
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<tr>
<td>4. Provide emergency antibiotics (see below) irrespective of prophylaxis</td>
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</table>

Emergency (1964) in adults - all patients present fever or impaired immunity (e.g. 3 g of 20% suspension) have at home & take all capsules at once if signs of bacterial infection occur | | | |

Penicillin allergy - increase erythromycin to 300 mg day or erythromycin 1 gram twice a day | | | |

Possible serious consequences of lack of antibiotics: fever, chills and/or vomiting/fever 38°C. Patients with these symptoms should take emergency antibiotics and consult a doctor or present at local hospital emergency department as soon as possible. | | | |

The minor vaccines (Prevent C, Menactra) are expensive; ask “shop around” with local pharmacies to get best price | | | |

Cost of vaccines and giving vaccines | | | |

@ # Pneumococcal vaccinations | | | |

1. Early (Prevent 13V) is a new addition to the schedule. It is a once only vaccine, currently no boosters, and is given as a single dose and administered IM. | | | |

2. THREAS (3 doses of 3MV) is a total in recommended at age 4-6 years. A second dose (first reimmunisation) of 3MV at age 6-8 years and a third dose (second reimmunisation) of 3MV to be given at age 6-10 years. 3MV (Pneumovax 23) is 8.5ml, and administered IM or SC. | | | |

3. If 3MV is due and patient not had a 13MV, give 13MV and then 8 weeks later give 3MV. 13MV (Prevent 13V) is 8 mL, and administered IM. | | | |

4. Meningococcal ACWY conjugate vaccine: Menveo and Menactra are licensed in patients up to 55 years. In practice, other vaccines can be administered if safer to patients > 55 years. Vaccination with this vaccine, every 5 years, has been recommended by the Australian Immunisation Handbook 16th edition. This is vaccine is replacing the meningococcal polysaccharide ACWY and conjugate vaccine. | | | |

5. If 16 weeks since conjugate ACWY given, another conjugate ACWY at 8 weeks and reimmunise with conjugate ACWY at 5 years. | | | |

Chemotherapy/immunosuppression | | | |

In general, immunisation should be undertaken no later than 2 months before chemotherapy or immunosuppressive therapy and delayed at least 3 months after chemotherapy or radiotherapy, or until adequate immunological function. Contact patient’s specialist physician or VSS for further information. | | | |

Blood tests | | | |

- FBC & film - can demonstrate lack of splenic function as shown by Howell-Jolly bodies on film. | | | |

- Idiopathic 0 cell marker tests are available at The Alfred and Monash Medical Centre and there are usually reduced in asplenic/hypoplastic patients. | | | |

Patient education | | | |

1. Patient and family/wheds should be aware of increased risk of bacterial infections and prevention strategies (antibiotics/vaccination/doctor’s orders). | | | |

2. Patients should report any sore minor infections (e.g. colds/sore throats) and fever without other signs or symptoms. 3. Avoid minor infections should be reviewed by a doctor. | | | |

- Some patients with minor infections should be reviewed by a doctor. | | | |

- Dental procedures do not require additional antibiotic cover unless they have an associated condition | | | |

5. Pregnancy or breastfeeding - underlying risk for overwhelming sepsis is not increased but vaccinations need to be discussed with GP | | | |

6. Vaccines: “disease kids” that contain many items including immunisation cards & alerts. All registered patients, their GPs receive an annual newsletter that contains medical updates and the latest information on staying healthy. | | | |

Alerts | | | |

- Patients should be encouraged to wear a medical alert medication or medical card at all times. | | | |

Patients medical notes should display a medical alert sticker. | | | |

Vaccines given by Service (VSS) Recommendations for the prevention of infection in asplenic, splenectomized or hypoplastic patients over 18 years of age (VSS) February 2014. Derived from Immunisation Handbook 12th edition, 2013. VSS is based at The Alfred hospital, Melbourne. Website: vss.org.au or email vssinfo@alfred.org.au F: (03) 9276 3428 F: (03) 9276 3351 3 of 3 pages
Confirmation of registration

(i) On-line “pop up” – SR #

(ii) VSR report based on medical history

- Patient
- GP
- Referring doctor
- Specialists
- Medical records of treating hospital

Turn around time from registration to receiving kit and report - 4/52

Education kit items

Asplenia/hyposplenism educational DVD

**Things to Remember**

- If unwell with fever or children - see a doctor or attend hospital
- Keep emergency supply of antibiotics
- Take daily antibiotics as advised
- Get boosts of pneumococcal vaccine
- Have yearly influenza vaccinations
- Wear a mask or a surgical mask
- Seek medical advice for any dental disease or injuries
- Seek medical advice before starting immuns
- Increased risk of infection is lifelong

**Agenda**

- EDUCATION
- RECORD
- FUTURE
- IMMUNISE
Registering process

Patient service – “one stop shop”

Time to register a patient
- Average 1-1.5 hours
- Range 30 mins to 2 hours

Register ~600 people per year

Patients  n= 4150 registered 1/10/14

**Splenectomy**  n= 3775
   majority are trauma and haematological disorders

**Functional Hyposplenism**  n= 140
   - Recommendations same as splenectomised patient

**Splenic artery embolisation**  n= 235
   - Modified recommendations
### Victorian Spleen Service – Patient data

<table>
<thead>
<tr>
<th>Reasons for splenectomies</th>
<th>n= 3775</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma</td>
<td>1232    (34%)</td>
</tr>
<tr>
<td>Haematological disorder</td>
<td>935     (25%)</td>
</tr>
<tr>
<td>Haematological cancer</td>
<td>300     (8%)</td>
</tr>
<tr>
<td>Cancer</td>
<td>361     (9%)</td>
</tr>
<tr>
<td>Not planned</td>
<td>369     (9%)</td>
</tr>
<tr>
<td>Other</td>
<td>578     (15%)</td>
</tr>
</tbody>
</table>

#### Age

<table>
<thead>
<tr>
<th>Age</th>
<th>2 weeks – 92 years of age mean 51 yrs</th>
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</table>

#### Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>54% Males</th>
</tr>
</thead>
</table>

(i) Interesting cases – exomphalos n = 1

- aged < 12 months n = 9 (2%)
- aged < 18 years n = 136 (3%)
(ii) Interesting cases - EBV

Spontaneous rupture

n = 7

(iii) Follow up
Annual newsletters sent out
  RTS letters – contact registrant
  GP

(iv) Postal survey in 2010 (with annual newsletter)

Registry/patient issues

(i) Refused registration – 0.095%
4 people
  1 - felt not necessary
  1 - reminded him of his colon cancer
  2 - concerns about security

(ii) Complaints
1 person - Alfred ethics – delay in being contacted

How to complain:
Patient information sheet gives non-registry contact (Alfred ethics)
Reminders (1) - annual newsletter

Emailed to all VSR registrants or posted to those without an email and posted to their nominated GPs.

Reminders (2)

Phone App  
(Karin Leder, David Morrison, Dr Nick Carr & PJ)

“SPLEEN-IE”  
I for immunisations & E for education

Spleen Team – VAXIGRANT (Sanofi Pasteur)

• Only available on iPhones

• Record vaccine histories and will upload to our database (back end)

• Access is postcode sensitive

• Dec 2014
Governance & ethics & legal

1. Ownership / Custodians
✓ ALFRED HEALTH

2. Accountability
• Business – ID Business Manager – Mr Brian Price (DS & PJ)
• Alfred legal team – meetings PRN
• Management Group (Staff meetings – monthly)
  Medical recommendations – reviewed ++ – updated annually
  Academic – research proposals
  Patient management
  Minuted & circulated to staff of Alfred plus wide range of others

3. Reporting
• DOH every 2 years
• Stakeholders
  Feedback to hospitals - SR reports only or PRN
• Registrants – annual newsletter

4. Operations manual
Governance & ethics & legal cont’d

5. Advocates
   Patient support group – review documents
   SAR Team – vaccine costs

6. Informed consent

   ALL PATIENTS informed about referral to service
   Inpatient issues
   → Timing – post op
   → Forget visit (education kit left)
   → Lose/not get SAR # “pop up” (referring person’s details recorded)
   → Spleen nurses always document visit

   → “OPT OUT patients” – treating doctors coordinate registration

   LEGAL ISSUES
   Patient consent
   Written consent (phased out)
     Paper & on-line form box ticked “patient knows data going to registry”

   Ongoing contact via newsletters & advice line

Privacy Laws Complex
Aim - protect the privacy of patients (good)

(i) Collect info- OK
(ii) Disclosing to SR

Healthy Privacy Principle 2.2a - use or disclosure of personal information
If an APP entity (ALFRED HEALTH) holds personal information about an individual that was collected for a particular purpose (the primary purpose), the entity must not use or disclose the information for another purpose (the secondary purpose).

Spleen Registry - legal team
(i) Non Alfred “health care” entity eg. RMH send patient info to us - disclosure is covered by Health Privacy Principle 2 and consent not required because the patient would reasonably expect RMH to disclose info to us for the purpose of the patient going on the Spleen Register (ongoing medical care).

(ii) Quandary:
DoH funds SR to reduce infections in our population
DoH unable to release information – Privacy issues
identify a “lawful” reason to disclose information – ? imminent threat

(Written patient consent – ideal but impractical)
Legal

2007 question ……

Can we be sued?
How responsible is SR to the registered population?

Scenario: registered patient – severe pneumococcal infection - patient felt we failed to remind to them to have a pneumococcal vaccine?

SR: no direct care of the patient

Patient informed on patient information sheet
“you are responsible for your ongoing health after splenectomy/diagnosis of hyposplenism”

Data management

Data
• Referrals to service both paper & on-line
• Single entry (updated at time of patient contact / ongoing contact)
• Back-up = Servers – Monash & Alfred

Data rules
Release/withdrawal from database – in writing

Data linkage – one attempt
Assess patient outcome data request DOH for Student’s study – denied

REGISTRY RULES
(i) 3 contact phone numbers
(ii) Reduce misclassification
    ➢ Team discussions
    ➢ Obtain additional documents to support (discharge summaries)
    ➢ Deaths – as much info as possible is collected
        (family members/ GP/ hospital)
Cost effective analysis

Health economist Dr Lisa Gold – published 2006 ANZJPH

MODEL - Based on OPSI case costs $50K (range $27,014 - $96,513)

Over lifetime of cohort of 1000 people:

- $105,154 per case of OPSI avoided
- $16,113 per life year gained

Life years gained compare favourably to other public health interventions eg. colorectal cancer screening ($17,000 DALY)

DALY disability-adjusted life year - measure disease burden, number of years lost due to ill-health, disability or early death

Post-splenectomy registry found to be cost effective AND had additional other health benefits (reduction in overall infections).


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Referrals to Victorian Spleen Service
Dec 2003 - Dec 2013

- Cumulative
- Annual

- Statewide funding started July 2007
Collaborative work

1. Department of Health, Victoria
2. Australian Immunisation Handbook
3. Therapeutic guidelines antibiotics
4. Close links with Trauma Units, GPs, ICU, Haematologists, Surgical Units
5. Established links with pharmacy/drug information
6. Paediatricians
7. Peter McCallum Cancer Centre late effects clinic staff have made routine registration as normal practice
8. Regional Victoria
9. St Vincent’s Correctional Health
10. Indigenous Australians
11. Emergency Departments
12. Forensic Pathology
13. Non Victorian
   - INTERSTATE
   - INTERNATIONAL (NZ)

What have we accomplished in 11 years

Ongoing funding!

Organised a “spleen team” – clinical & IT
Strong collaborations
Education kit with a DVD
Medical recommendations – advisors to Immunisation Handbook, Therapeutics
Website
On-line registration
Phone App – Vaxigrant award
Research
   - NHMRC funded – vaccine RCT
   - Developed a test for supporting diagnosis of functional hyposplenia (IgM memory B cell test)
   - Embolisation follow up study
Cost effectiveness

Healthy publication list

A variety of names!
Additional activities

(i) Royal Children’s Hospital -
Asplenia/Hyposplenia Paediatric Guidelines
June 2014
Melbourne Vaccine Education Centre
www.mvec.vic.edu.au
special risk guidelines link

(ii) Pregnancy & breastfeeding guidelines

(iii) National NCIRS – advice email

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<table>
<thead>
<tr>
<th>Title</th>
<th>Journal &amp; Year</th>
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<tbody>
<tr>
<td>1 Healthcare provider knowledge, attitudes and practices in patients on the Victorian Spleen Registry</td>
<td>ANZJPH 2014</td>
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<tr>
<td>2 Adherence to infection prevention measures in a statewide spleen registry</td>
<td>MJA 2014</td>
</tr>
<tr>
<td>3 How to treat – asplenia &amp; hyposplenism</td>
<td>Aust Doctor 2013</td>
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<td>4 Splenectomy Associated Changes in IgM Memory B Cells in an Adult Spleen Registry Cohort</td>
<td>PLOS 2011</td>
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<td>5 The influence of splenectomy on the infectious complications and outcomes of people with HIV: marked, sustained elevation in risk of severe infection with bacteria including Streptococcus pneumoniae.</td>
<td>JAIDS 2010</td>
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<td>6 Postsplenectomy infection - Strategies for prevention in general practice</td>
<td>Aust Fam P 2010</td>
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<tr>
<td>7 Spleen registry may help reduce the incidence of overwhelming postsplenectomy infection in Victoria</td>
<td>MJA 2009</td>
</tr>
<tr>
<td>8 Patient knowledge of the risks of post-splenectomy sepsis</td>
<td>ANZ J. Surg. 2008</td>
</tr>
<tr>
<td>9 Guidelines for the prevention of sepsis in asplenic and hyposplenic patients</td>
<td>IMJ 2008</td>
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<tr>
<td>10 Cost-effectiveness of a post-splenectomy registry for prevention of sepsis in the asplenic</td>
<td>ANZJPH 2006</td>
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</tbody>
</table>
SPLEEN REGISTRY
only one in Australia  the world
UK - closed

To our knowledge we are the only ones
• ACT
• NSW Wollongong

Collaboration with Queensland imminent
“Spleen Australia”
Acknowledgements

Denis Spelman & Ian Woolley
Julia McNamara & Nigel Pratt
Allen Cheng
Karin Leder
Jim Buttery
Paul Cameron
Participating patients
Alfred hospital’s ID Unit
AlfredHealth
Grants: Syd Wellard etc more here
To find us: spleen.org.au

Discussion points

1. **Opt out / privacy issues**
   
   Thoughts?
   
   2. **Governance** – are we there?

   3. **Suggestions**
      
       • Things we shouldn’t do
       
       • Things we should do
COSTS OF ASPLENIC/HYPOSPLENIC VACCINES

Private Chemists (initial round)

**Pneumococcal**
- Pneumo conjugate (Prevenar 13) $110
- Pneumo polysaccharide (Pneumovax23) $36 (PBS)

**Meningococcal**
- 4vMenCV (Menactra/Menveo) need 2 $160
- MenB (Bexsero) need 2 $260

**Haemophilus Influenzae**
- Hib $36 (PBS)

TOTAL ~$602

Hospital pharmacy costs as outpatient (except Men B)
The PBS co-contribution price of $5.90 (health card) or $36.10 (no health card)

**Free if an inpatient**

Medical recommendations for people with asplenia/hyposplenism
www.spleen.org.au