Addressing the Health Needs of Child Refugees in Rhode Island

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OVERVIEW

- Introduction to refugees in RI
- Challenges in pediatric refugee care
- Project aims and methods
- Refugee health needs
- Vaccination strategy
- Future directions
- Conclusion

Who is a refugee?

A person who is forced to flee his or her home country because of well-founded fear of persecution on the basis of:

- race
- religion
- membership in a social group
- political opinion
- national origin

US Committee for Refugees, *Refugee Reports* 31 Dec 1995; XVI(12).

Refugees in Rhode Island

	2000	2004	2006	2008
Liberia	270	223	85	12
USSR	33	15	20	0
East Africa	0	24	10	18
Burundi	0	1	20	47
other African nations	0	6 (Rwanda and Togo)	0	11 (Ivory Coast, Rwanda, D.R. Congo)
SE Asia	0	44 (Laos)	0	2 (Thailand)
Haiti and Cuba	3	2	1	0
Iraq and Iran	3	0	0	44

Data from: US Department of Health and Human Services, Office of Refugee Resettlement. Report to Congress: Fiscal Years 2000-2008. http://www.acf.hhs.gov/programs/orr/data/ORR.

Challenges in Pediatric Refugee Care

- Specific health problems of refugee children are neglected by our current system of care
- No standards of screening and treatment
- Language and cultural barriers
- Financial constraints and insurance
- Coordination of care and services

Project Aims

1. Identify health problems specific to refugee children

2. Determine most effective screening and treatment practices

3. Define best strategy for varicella immunization
    - serotesting vs. universal vaccination

4. Create a screening and treatment protocol for ongoing, standardized care.

Methods

- Literature review of common refugee medical problems and approaches to care
- Review guidelines and data from states with large refugee populations: MN, MA, NY, FL
    - What are they doing?
    - When are they doing it?
    - How well is it working?
- Decision analysis of VZV prevention

Methods

- Clinic experience

  Examine current practices at Hasbro to provide protocol framework

- Field experience

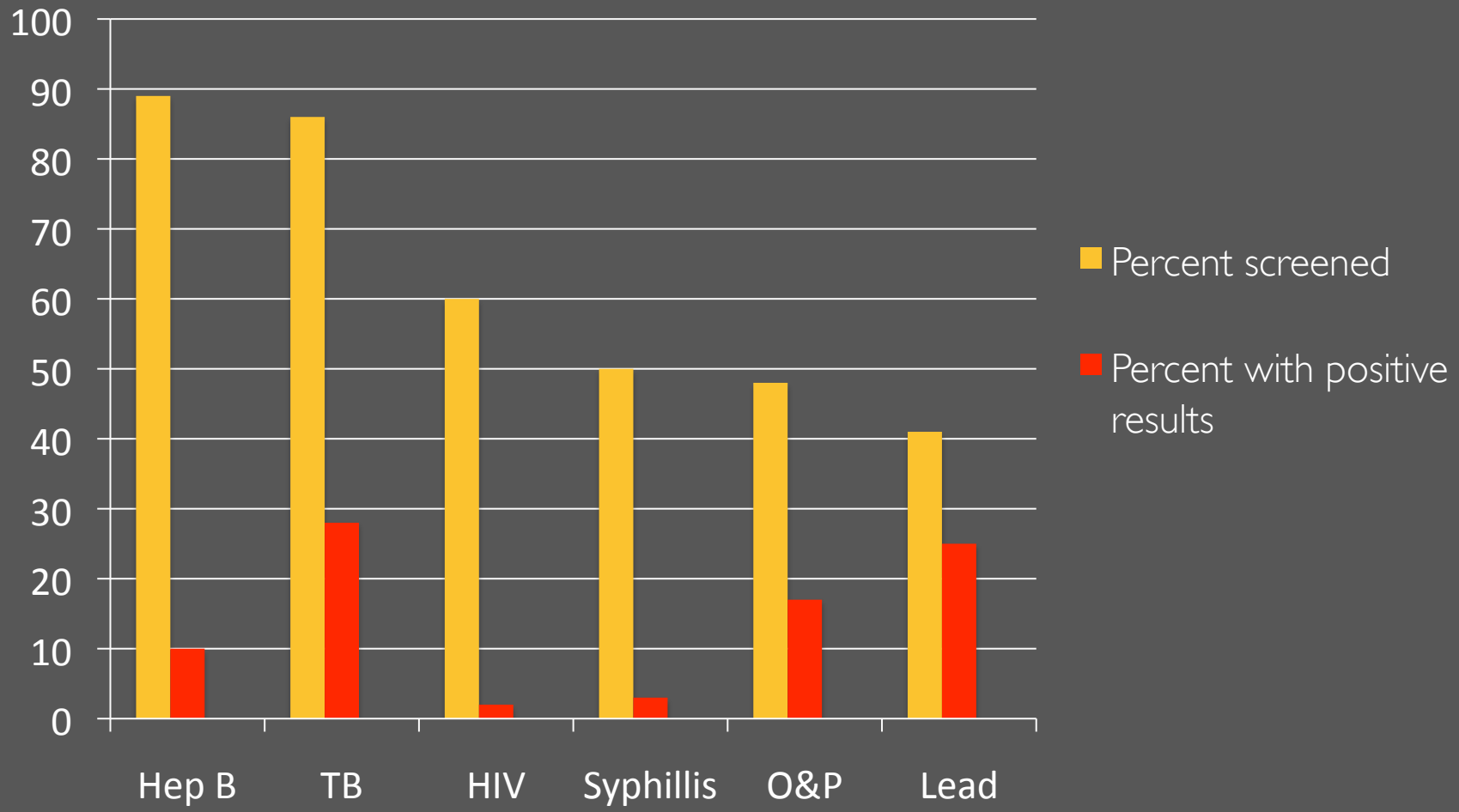
  Working with individual refugee family from Eritrea

- End Product: Comprehensive checklist/protocol for Hasbro providers outlining ongoing treatment plan for refugees.

Hasbro Hospital Refugee Clinic

- One clinic day each month: 4-10 new patients
- Lack of ongoing care when integrated into general pediatric clinic
- Emphasis on screening for infectious disease
- No standardized guidelines on refugee care
- Limited knowledge of refugee pediatric health issues: variability in treatment

Variability in refugee screenings compared to disease prevalence



Data from: Watts DJ, Friedman JF, Vivier PM, Tompkins CEA, Alario AJ. Health status and subspecialty needs or refugee children after resettlement. Poster presentation at: Pediatric Academic Society Annual Meeting: 5 May 2008; Honolulu: HI.

Refugee Health Needs

Culturally-appropriate developmental screenings

- Frequent age inaccuracies

Long-term nutritional assessments and treatment

- Malnutrition and stunting 25%
- Iron deficiency 30-50%
- Lead poisoning – closely linked to iron 27% and increasing
- Vitamin D deficiency 22-30%

Refugee Health Needs

Acute psychiatric problems

- Trauma, violence, safety
- Must be linguistically and culturally appropriate
- PTSD and anxiety (up to 50%)

Chronic psychiatric problems

- Long-term adjustment difficulty
- School and language
- Family stress and poverty
- Can persist for years (after 12 years – up to 35% PTSD)
- Depression (up to 48%)

Refugee Health Needs

Referrals with follow-up

- Oral healthcare
  - Dental caries in 38% African and 79% European refugees
- Vision screens and ophthalmology
- Mental health counseling
- Lead clinic
- ID specialists
- GI specialists

Factors Considered in VZV Vaccine Strategy

- Prevalence of antibody in refugee children
- Reliability of +/- history of VZV
- Efficacy and risks of vaccination
- Sensitivity and specificity of serotesting
- Costs
- Risk of loss to follow-up

VZV Vaccine vs. Serology

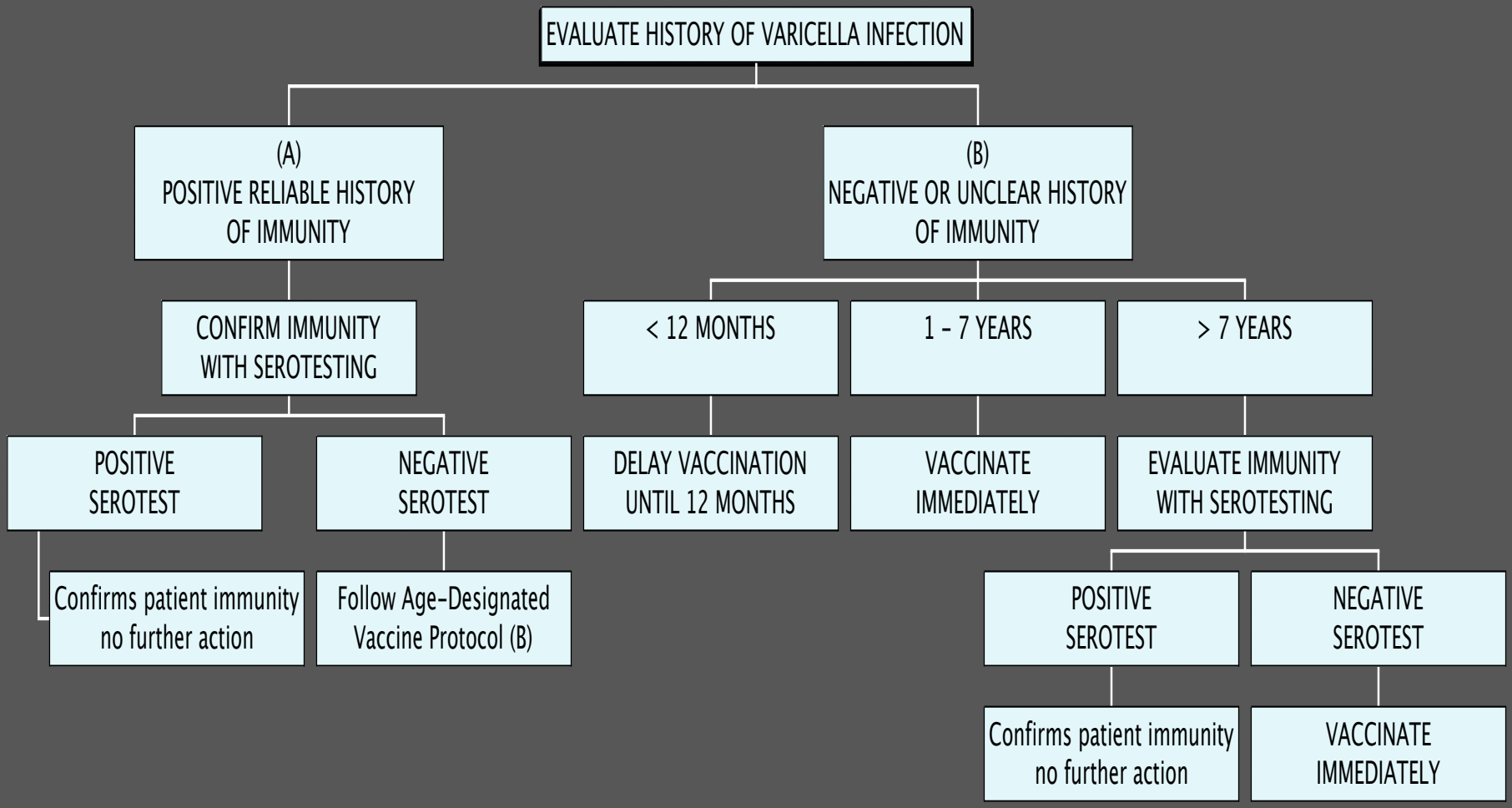
VZV vaccination	$180-$250
Varicella titer serology	$18 approx.
PPV of + VZV history	84%
NPV of - VZV history	47%
VZV vaccine risks	extremely low
Previous immunity	no added risks
Clinic follow-up rate	greater than 91%

Varicella Epidemiology

Age (years)	Prevalence of VZV Antibody	Suggested strategy
1 – 4	10 – 28 %	Universal vaccination
5 – 7	45 – 78 %	Variable
7 – 18	60 – 95 %	Serology

- VZV infection - later in childhood in tropical and subtropical environments.
- Young refugee children – more vulnerable to infection.

Varicella Immunization Flowchart



Future Directions

- Inconclusive data on varicella in 5-7 y.o. prompts further investigation
- Develop culturally specific diagnostic tools
    - Developmental screens
    - Depression/PTSD screens
- Technological tools to tailor screenings and treatment
- Beyond the hospital: integrate services for more coordinated, successful care

CONCLUSIONS

- Refugee children - unique health needs
- Current care too focused on ID
- Need culturally appropriate diagnostic & treatment tools
- Protocol being implemented at Hasbro – a first step.

Get involved: http://www.iiri.org/
Contact Mary Ellen Lynch or Matthew McLaren