

Vaccines Survey

Fields marked with * are mandatory.



Vaccines Audit

Continuing with the line of work consisting in the realization of "clinical audits" on those relevant topics in pediatric transplantation on which there is no general consensus, at this time it was voted in the last Transplantchild board held in Madrid that "Vaccination in Pediatric Transplantation" would be the next topic to be audited.

As you perfectly know after your active participation in the first audit carried out on PTLD the objective of these audits is to know "what we are doing" at present in the different centers or transplant programs in reference to these issues.

This audit, on "Vaccination in Pediatric Transplantation" is a survey about your center approach to all aspects related to this hot topic. It includes all those questions aimed at knowing what is the usual practice of the centers / programs in reference to the vaccination of candidates or transplanted children.

A first draft (in content and format) of the survey was elaborated by Dr. D. Dona from Padova and presented on the ERN board held in November 2019. The draft was discussed in situ by the board attendants and subsequently submitted to all ERN members to be evaluated. All suggested modifications were incorporated resulting in the final survey format we're now sending to all of you.

It would be great to have your responses back throughout the coming months of July and August so that we can analyze the results and prepare the first document with them in September.

As always we here in La Paz will be completely willing to collaborate in everything you need.

We think this audit it's going to be much shorter than the PTLD one because of the selected topic.

Thanks in advance for your collaboration, and looking forward to you.

Your Name:

* Email

Centre:

- King's College, London, England
- Vilnius University Hospital Santaros Klinikos, Lithuania
- Centro Hospitalar e Universitário de Coimbra, Portugal
- University Medical Center Utrecht, The Netherlands
- Children's Memorial Health Institute, Poland
- Hospital Universitario la Paz, España
- Medizinische Hochschule Hannover, Germany
- Centro Hospitalar de Lisboa Norte, Portugal
- Ospedale Papa Giovanni XXIII, Bergamo, Italy
- Centro Hospitalar do Porto, Portugal
- Karolinska University Hospital, Sweden
- Hôpitaux de Paris, Hôpital Bicêtre, France
- Hôpitaux de Paris, Hôpital Necker-Enfants Malades, France
- Skåne University Hospital, Lund, Sweden
- Ospedale Pediatrico Bambino Gesù, Rome, Italy
- University Hospitals Saint Luc, Belgium
- Azienda ospedaliera di Padova, Italy
- ISMETT Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione, Palermo, Italy
- Centre for Pediatric Lung Transplantation, Medical University of Vienna, Austria
- University Hospital Centre Zagreb, Croatia
- Semmelweis University, Hungary
- Tartu University Hospital, Estonia
- Children's Clinical University Hospital, Riga, Latvia
- Centre Hospitalier du Luxembourg, Luxembourg
- Mater Dei Hospital, Malta
- Rigshospitalet University Hospital, Denmark
- Odense University Hospital, Denmark

* Type of Transplant are you involved:

- Renal
- BMT /HSCT
- Cardiac
- Lung
- Liver
- Pancreas
- Intestine
- Multi-organ/multivisceral
- Other

* Which is your specialty?

- Pediatric surgeon
- Pediatrician in charge of solid organ transplant recipients
- Pediatrician performing hematopoietic stem-cell transplantation
- Pediatric Infectious Disease specialist
- Others

* How many years have you been working in pediatric transplantation?

- < 5 years
- 5-10 years
- 10-15 years
- > 15 years

General practices

* How many children with SOT/HSCT are actually being followed in your Department?

- < 25
- 25-50
- 50-75
- 75-100
- >100

* Is an official immunization protocol for pediatric transplant patient available in your hospital?

- Yes for SOT and HSCT
- Yes, only for SOT
- Yes, only for HSCT
- No
- Other

* How many patients are fully immunized at the time of transplantation (according to age and on your country schedule)?

- 0-40%
- 40-80%
- 80-100%

* How can you explain the under-vaccination of pediatric transplant recipients? (you can mark more than one answer)

- Insufficient time before transplant
- Patient is too sick for vaccinations
- Parents hesitancy
- Primary care physician hesitancy
- Specialist hesitancy
- Vaccines are not a focus
- Other

* How do you face patient hesitancy?

- We do not proceed with transplant without vaccinations
- We delay transplant till MMRV has been administered
- We still proceed with the transplant informing parents about the risks of non-vaccination
- We organize meetings with parents to provide correct information on vaccines

Waiting list

Do you check antibody titer before the admission to the waiting list?

	100%	80-100%	40-80%	0-40%	Never
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Influenza vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you check antibody titer while the patient is on the waiting list?

	100%	80-100%	40-80%	0-40%	Never
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you use an accelerated schedule for live viral vaccines (at 6 months of age) according to transplant urgency?

	100%	80-100%	40-80%	0-40%	Never
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-transplantation practices

* In the pre-transplant period, do you:

- Prescribe vaccinations
- Administer indications for vaccines

* In the pre-transplant period, in your center:

- All vaccinations are provided

- Some vaccinations are provided
- No vaccinations are provided but are administrated in other center
- No vaccinations are provided

In case of some vaccinations are prescribed, please specify:

- Influenza vaccine
- Pneumococcal vaccine
- Meningococcal vaccine
- Tdap vaccine
- MMR vaccine
- Varicella vaccine
- Hepatitis B vaccine
- Hepatitis A vaccine
- HPV vaccine
- Rotavirus vaccine
- BCG vaccination

If no, why don't you prescribe vaccinations in your center?

- Staff not trained
- Time consuming process
- Vaccines are not a focus
- According to our organization vaccines are provided by other service
- Other

Before transplant, in what percentage do you recommend the following vaccinations:

	100%	80-100%	40-80%	0-40%	Never
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphteria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal A, C, Y W135 vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatits B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatits A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Influenza vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* HPV vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How long do you wait before proceeding with transplant after this vaccinations?

	<input type="radio"/> less 2 weeks	<input type="radio"/> 2-4 weeks	<input type="radio"/> more 4 weeks
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* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal A, C, Y W135 vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Influenza vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* HPV vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Post-transplantation practices

* In the post-transplant period, do you prescribed vaccinations in your center?

- All vaccinations are provided
- Some vaccinations are provided
- No vaccination is provided

In the post-transplant period, do you prescribed vaccinations in your center?

- Influenza vaccine
- Pneumococcal vaccine
- Meningococcal vaccine
- Tdap vaccine
- MMR vaccine
- Varicella vaccine
- Hepatitis B vaccine
- Hepatitis A vaccine
- HPV vaccine
- Rotavirus vaccine
- BCG vaccination

If no, why don't you prescribe vaccinations in your center?

- Staff not trained
- Time consuming process
- Vaccines are not a focus
- According to our organization vaccines are provided by other service
- Other

* Which kind of immunological evaluation do you perform before restarting vaccinations in the post-transplant period?

- None
- Complete blood count with differential
- Immunoglobulin levels
- IgG subset determinations
- Complement activity
- Lymphocyte-subset analysis
- Immunoproliferation assays
- Other

Others, specify:

What antibody titer do you check after transplant?

	100%	80-100%	40-80%	0-40%	Never
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, how long do you wait to monitor antibodies?

	2-4 weeks	2-4 months	5-6 months	7-10 months	Other
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, how long do you wait before monitoring antibodies?

	0-3 months after transplant	4-8 months after transplant	9-12 months after transplant	13-15 months after transplant	16-24 months after transplant	Until the child is on single-agent immunosuppression	Until the child is weaned off steroids	Other
MMR vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you administer this vaccines in the post-transplant period?

	Yes	No	Other
* Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal conjugate vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Pneumococcal polysaccharide vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal A, C, Y W135 vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Meningococcal B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Influenza vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* HPV vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Yes, how long do you wait for vaccines administration after transplant?

	0-3 months after transplant	4-8 months after transplant	9-12 months after transplant	13-15 months after transplant	16-24 months after transplant	Until the child is on single-agent immunosuppression	Until the child is weaned off steroids	Other
Varicella vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tetanus, Diphtheria, Pertussis vaccines (Tdap)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pneumococcal vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meningococcal A, C, Y W135 vaccines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meningococcal B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hepatitis B vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hepatitis A vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influenza vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HPV vaccine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Do you follow this schedule for pneumococcal vaccination in transplant patients?

- < 2y: 3 doses PCV13 (2-4-11m) 2 - 6y:
- not vaccinated: 2 doses PCV13 (0-2m) + PPSV23 (4m) - < 3 doses: 2 doses PCV13
- received PCV13: PPSV23 at 2y >6 y:
- not vaccinated: 1 dose PCV13+ 1 dose PPSV23 (after 8 weeks)
- received PCV13+PCV23: PPSV23 after 5y
- received PPSV23: PCV13+PPSV23 after 5y

- Yes
- No
- Other

* Do you administer respiratory syncytial virus (RSV)?

- Yes, but only patients before 2 years old
- Yes, to all patients
- No
- Others

* What is the influenza vaccine coverage rate among the healthcare workers in your hospital? (data referring to season 2018-2019)

- 80-100%
- 60-80%
- 40-60%
- 20-40%
- 0-20%
- Unknown

* Do you indicate seasonal influenza virus vaccination for family members or others living with the transplant recipient?

- Yes, indefinitely
- Yes, but time limited
- No

