# Esophageal atresia WG

Chair: F Gottrand

Co-Chair: L Dall'Oglio

Secretary: U Krishnan



#### Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021

## Summary of activities 2020

O'Donnell JEM, Purcell M, Mousa H, Dall'Oglio L, Rosen R, Faure C, Gottrand F, Krishnan U. Clinician Knowledge of Societal Guidelines on Management of Gastrointestinal Complications in Esophageal Atresia. J Pediatr Gastroenterol Nutr. 2021 Feb 1;72(2):232-238.

Ten Kate CA, Tambucci R, Vlot J, Spaander MCW, Gottrand F, Wijnen RMH, Dall'Oglio L. An international survey on anastomotic stricture management after esophageal atresia repair: considerations and advisory statements. Surg Endosc. 2020 Aug 3. doi: 10.1007/s00464-020-07844-6. Epub ahead of print.



## Esophageal Atresia COVID19 International Network on Esophageal Atresia Registry INoEA.org March 22, 2021

	EA/TEF n=17		
Gender	9M/8F		
EA type C / A / other	11 / 3 / 2 (missing n=1)		
Mean Age	6.8 years		
Associated respiratory problems	Asthma n=3		
	Tracheomalacia n=7		
	Recurrent chest infections n=3		
Associated malformation	Cardiac n=6		
Associated digestive problems	Anastomotic strictures n=7		
Medication prior to COVID19	PPI n=4 fluticasone n=3		
	bronchodilatators n=2		
	furosemide, enalapril n=1		
Number of days since onset of illness	4.1 days		
(days) to reach the peak of COVID-19	Asymptomatic n=2		
	Pneumonia n=1		
Outcome	No hospitalization n=14		
	Admitted on the ward and discharged n=3		
	Exudative retinopathy n=1		
Respiratory support at peak of COVID-19	O2 n=1		
Ped ICU admission	None		



#### INOEA International Network of Esophageal Atresia

• In addition, 3 adults (2 males, 30 years) with EA/TEF (1 type A, 1 type B, 1 type C) have been reported to be infected by SARS-CoV-2, (1 from India, 1 from Italy, 1 from France). Two were admitted on the ward. All three had an uneventful outcome.

Anastassios C. Koumbourlis, Yvonne Belessis, Mary Cataletto, Renato Cutrera, Emily DeBoer, Mikhail Kazachkov, Sophie Leberge, Jonathan Popler, Federica Porcaro, Thomas Kovesi. Care Recommendations for the Respiratory Complications of Esophageal Atresia-Tracheoesophageal Fistula The International Network of Esophageal Atresia, Respiratory Complications Working Group. Pediatr Pulmonol. 2020 Jul 27. doi: 10.1002/ppul.24982.

www.espghan.org http://www.inoea.org/ 11.06.2021

## **ERNICA:** European Reference Network for rare Inherited and Congenital (digestive and gastrointestinal) Anomalies

Dingemann C, Eaton S, Aksnes G, Bagolan P, Cross KM, De Coppi P, Fruithof J, Gamba P, Goldschmidt I, Gottrand F, Pirr S, Rasmussen L, Sfeir R, Slater G, Suominen J, Svensson JF, Thorup JM, Tytgat SHAJ, van der Zee DC, Wessel L, Widenmann-Grolig A, Wijnen R, Zetterquist W, Ure BM. ERNICA Consensus Conference on the Management of Patients with Long-Gap Esophageal Atresia: Perioperative, Surgical, and Long-Term Management. Eur J Pediatr Surg. 2021 Jun;31(3):214-225.



CAN EAT - Care and Nutrition in Esophageal Atresia: An ERNICA animation for parents and families - YouTube

https://www.youtube.com/watch?v=6sdwKlbZZoc&list= PLdmabVdgL6xlijhHaXmWQp1I1W8vUOZNn

#### Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021

#### **EOE EA network**

- Due to General Data Protection Regulation issues impossible to send data from European citizen to Australia (database finally moved to Lille): all Agreements (ethical, privacy...) obtained in France!
- E-CRF retrospective ready and functioning
- Agrements still in process with several participating centers!

www.espghan.org 11.06.2021

#### **EOE\_RETRO**

Working Group Meetings – WCPGHAN 11/06/2021



### **Agrement signed**

Country	Site	PI		
France	Hospital J de Flandre, Lille	Prof Frederic Gottrand		
	Sydney Children's Hospital	Dr Usha Krishnan		
Australia	Canberra Hospital	Pr David Croaker		
	The Royal Children's Hospital, Melbourne	Dr Michael Nightingale		
		Professor Raanan Shamir		
Israel	Schneider Children's Medical Center of Israel	Dr Noam Zevit		
isiaei		Dr Ari Silbermintz		
	Soroka University Medical Center	Dr Baruch Yerushalmi		
Netherlands	Emma Children's Hospital	Dr Michiel van Wjik		
Finland	Children's Hospital, Helsinki	Antti Ilmari Koivusalo		

## **Agrement in review**

Country	Site	PI
Belgium	Universitair Kinderziekenhuis, Brussels CHC Clinique Saint-Joseph Ghent University hospital	Prof Yvan Vandenplas Dr Gigi Veereman Dr Koen Huysentruyt Dr Olivia Bauraind Dr Stephanie Van Biervliet Dr Saskia Vandevelde



### No agrement

Country	Site	PI
	Great Ormond Street Hospital for Sick Children	Dr Osvaldo Borelli
UK	Epson and ST Helier University Hospitals	Dr Sonny Chong
	Bristol Royal Hospital for Children	Dr Christine Spray
Germany	University of Munich Medical Center	Dr Sibylle Koletzko
	laso General Pediatric Hospital, Athens	Dr Ioanna Panayotou –
Greece	laso General Fediatric Hospital, Athens	Angelakopoulou
	Athens Children's Hospital	Prof Alexandra Papadopoulou
		Prof Luigi Dalloglio
	Bambino Gesu Children's Hospital, IRCCS, Rome	Dr Francesca Rea
		Dr Renata Tambucci
Italy		Dr Paola Deangelis
italy	University of Messina Hospital	Dr Claudio Romano
	Policlinico Hospital, Bari	Dr Maria Elisabetta
	Policifico Hospital, Ball	Baldassarre
	Sapienza-University of Rome	Dr Salvatore Olivia

## No agrement

Country	Site	PI
Sweden	Karolinska University Hospital	Dr Jan Svensson
Lebanon	Makassed University General Hospital, Lebanon	Dr Aziz Koleilat Dr Shrine Mneimneh
Slovenia	Children's Hospital, Ljubljana	Prof Rok Orel
Lithuania	Vilnius University Children's Hospital	Dr Vaidotas Urbonas
Switzerland	University Hospital Lausanne	Dr Andreas Nydegger
Switzerialiu	Offiversity Hospital Lausaille	Dr Sabine Vasseur
	Rady Children's Hospital-San Diego	Dr Hayat Mousa
	Cincinnati Children's Hospital Medical Center	Dr Von Allmen, Daniel
USA		Dr Peter Ngo
USA	Boston's children hospital	Dr Mike Manfredi
		Dr Russell W. Jennings
	NYU Langone Medical Center	Dr Mikhail Kazachkov
Canada	Hospital Pediatrics at Alberta Health Services - Calgary,	Michelle Bailey
Dubai	Al Jalila Children's Specialty Hospital, Dubai ,UAE	Dr Christos Tzivinikos

#### e-CRF ACCESS

CENTER	SITE_NAME	FIRST_NAME	LAST_NAME	N° patients included n = 49
01	Sydney Children's Hospital, AUSTRALIA	USHA	KRISHNAN	28
02	Hospital J de Flandre, FRANCE	FREDERIC	GOTTRAND	19
08	Israel	ARI	SILBERMINTZ	0
08	Israel	RAANAN	SHAMIR	0
08	Israel	NOAM	ZEVIT	0
12	Amsterdam	MICHIEL	VAN WJIK	0
21	Finland	ANTTI	KOIVUSALO	0
30	Al Jalila Children's Specialty Hospital, DUBAI	CHRISTOS	TZIVINIKOS	2

#### **EOE EA network**

 How can we help you expediting Agreements signature in your centers? This is the only way to get access to the e-CRF



www.espghan.org 11.06.2021 1

#### **EOE EA: Preliminary data**

47 patients analysed

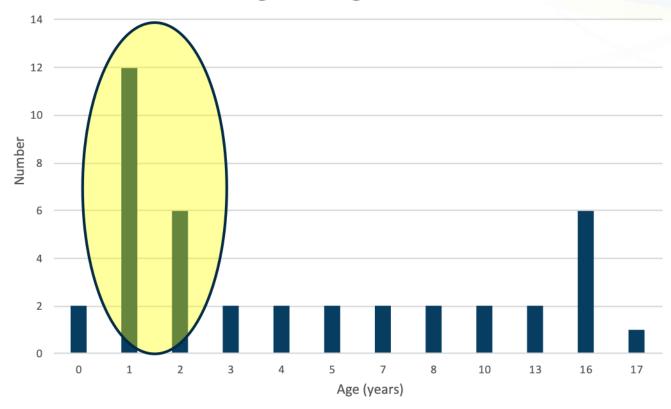
Type A	Туре В	Type C	Type D	Type E
7	1	31	1	2
17%	2%	74%	2%	5%
(n=42)				

62% male and 38 % female

→ Male-female ratio: 1.61

www.espghan.org 11.06.2021

#### Age at diagnosis:





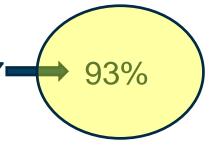
www.espghan.org 11.06.2021 **17** 

#### **Symptoms:**

Asymptomatic	Regurgitation	Dysphagia	Vomiting	Feeding difficulties
4	9	21	18	21
9%	20%	47%	40%	47%

• 2 congenital stenosis → 4%

• PPI at the time of diagnosis: 25/27



www.espghan.org 11.06.2021

## **Endoscopy:**• (n=40)

Normal	Anastomotic Stricture	Rings	Exsudate	Edema	Furrow		Trachealisat ion
11	17	0	3	4	8	1	0
23%	36%	0%	6%	9%	40%		0%
Diama	00 (- 47)		1				

#### Biopsies (n=47): N° EoE/Hpf

Esophagus	Proximal	Mid	Distal
mean	26	26	33
ranges	2-91	0-80	1-96

11.06.2021 www.espghan.org

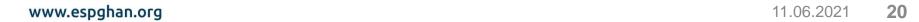
#### **Treatment:**

• (n=30)

Fluticasone	Budesonid	e	PP! increas	ed
5	16		22	1
17%	53%		73%	
(n_20)				

• (n=29)

Targeted elimination diet	Elemental form	nula	No diet	therapy
4	2		23	
14%	7%		79%	



#### Post treatment

• Remission (*n*=37):

29	
78%	

• Relapse post treatment (n=33):



www.espghan.org 11.06.2021

#### Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021 **2** 

## INoEA Transition Working Group Update

#### Members

- Sub-speciality groups
- Pediatric and Adult Gastroenterology: Prof Christophe Faure (Lead), Prof Frederic Gottrand,, Dr Benjamin Gold, Dr Usha Krishnan, Dr David Seguy, Dr Andrew Taylor
- Surgery: Prof Rene Wijnen (Lead), Prof Luigi Dallioglio, Dr Mario Constantini
- Pulmonology: Prof Anastassios Koumbouralis and Prof Tom Kovesi (Joint Leads)
- ENT : Prof Mike Rutter (Lead)
- Feeding and Nutrition: Gastroenterologist: Dr Usha Krishnan (Lead), Dietician: Ms Jessica Menzies, Ms Audrey Vanmalleghem and Deglutologist: Dr Nathalie Rommel
- Psychology and QOL: Ms Michaela Dellenmark Blom (Lead), Dr Vuokko Wallace, Ms Evelyn Culnane
- Parent/Patient support groups : Mr Graham Slater (Lead, President of EAT)
- Literature Review: Dr Michael Dumont and Dr Hayley Slater

## Steps Completed

- Literature Review
- Summary Tables based on Literature Review
- Draft questions from sub groups <u>\(\frac{\sqrt}{2}\)</u>
- Drafting of sections, recommendations, referencing based on the questions and literature review by each sub group
  - Psychology and QOL
  - Respiratory <u></u>
  - Feeding and Nutrition

## Next Steps.....

- Drafting of sections, recommendations, referencing based on the questions and literature review by each sub group
  - Gastroenterology



Surgery



- ENT
- Online/F2F/Hybrid Voting on recommendations methodology

### Next Steps.....

- Collating all sections and drafting whole paper and circulating amongst whole group
- Deciding which journal to submit to
  - Diseases of Esophagus (both adult and paed GI/Surgeons read it but not so much from other specialities)
  - Frontiers (Open Access, includes all disciplines)
- Presentation in INoEA Congress in 2022
- Creation of Transition App for EA patients with funding support from ERNICA







Stay Safe

## Update on Old/New projects

- International survey on management of GERD in EA patients
- Survey Monkey link sent to ESPGHAN EA WG and INoEA members
- 40 respondents from 23 hospitals in 19 countries
- 87.5% aware of guidelines
- 35% prescribe PPI during first year
- 65% performed endoscopy/pH metry/Impedance testing for GERD screening
- 62.5% performed investigations as recommended by guidelines prior to fundoplication
- But only 22.5% performed fundoplication for refractory GERD as recommended in guidelines
- Paper currently being finalised for submission

## New Project

- In the survey 25 centres had indicated that they were interested in taking part in a multicentre study evaluating "Fundoplication outcomes in children with Esophageal Atresia", using Pressure Flow Analysis metrics (PFA) on Swallow Gateway Platform with High Resolution Impedance Manometry (HRIM) of the esophagus
- High-resolution manometry combined with impedance measurements, helps characterize the interplay between esophageal motor function and bolus clearance.
- PFA can offer new insights in this area and potentially help predict the likelihood of developing dysphagia post fundoplication and help with patient selection for anti reflux surgery

#### Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021 3

#### 51st Annual Meeting of the ESPGHAN

Geneva, 09-12 May 2018

## Anastomotic stricture in esophageal atresia: comparison of balloon *vs* bougie dilation

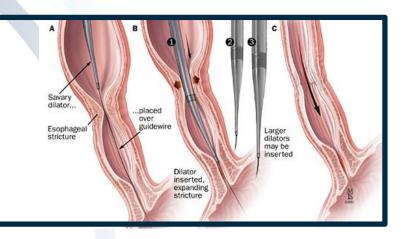


Digestive Endoscopy and Surgery Unit, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy

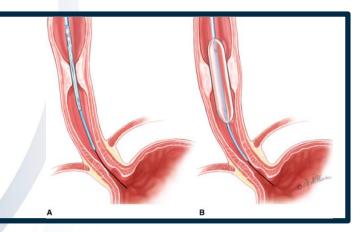


#### Two main categories of dilators exist:

fixed-diameter push-type dilators (bougie dilators)



radial expanding balloon dilators



## No clear advantage of either balloon or bougie dilation has been demonstrated

Data coming from two randomized, controlled trials comparing bougie with balloons dilators for benign strictures in adults found no differences in terms of efficacy and safety at 1 year.



Saeed ZA. Gastrointest Endosc 1995;41:189-95. Currently there are no controlled trials comparing efficacy and safety of hydrostatic balloon with bougie dilator for treatment of AS in EA patients

Therefore, due to the lack of strong evidences, the choice between balloon dilation and bougie is based only on operator experience and comfort with the equipment

www.espghan.org

Krishnan U. JPGN 2016;63:550-70. Tambucci R. Front Pediatr 2017;

ESPGHAN

#### **ESPGHAN** multicenter collaborative study

## Bougie vs Balloon dilators



# All data being collected and patient interactions are a part of routine patient care

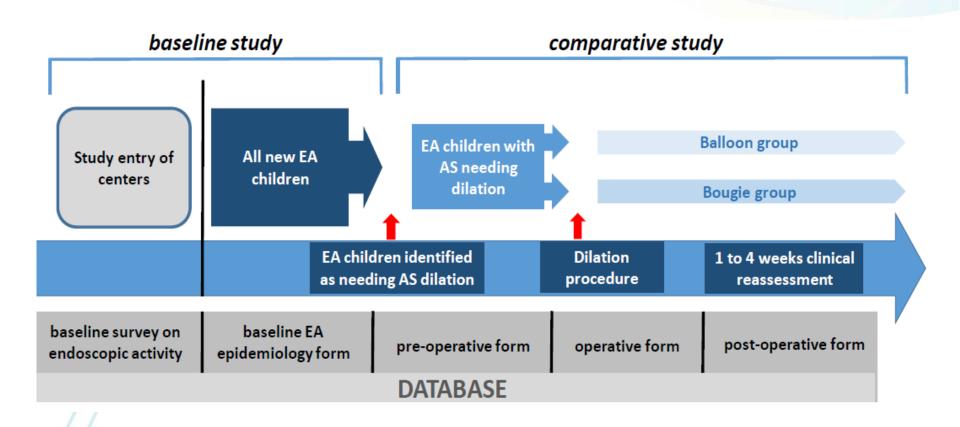
# **Primary endpoint**

Compare the <u>efficacy</u> of the balloon vs bougie dilations in terms of number of dilatation sessions per patients needed to achieve AN stricture resolution

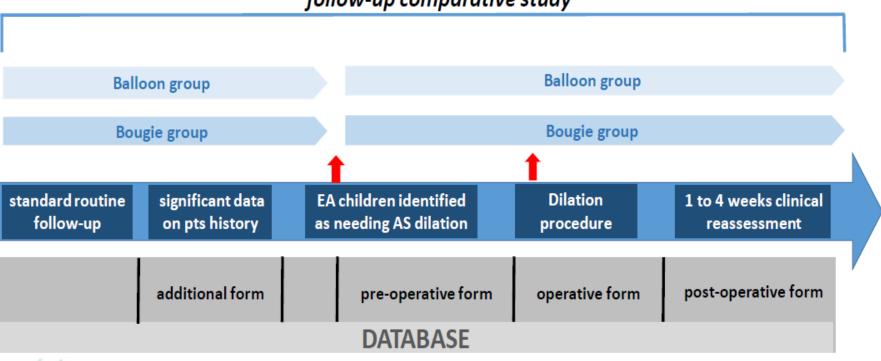
www.espghan.org

# **Secondary endpoints**

- Develop a multi-center database to organize an international survey about the endoscopy activity on EA patients
- Compare the safety profile of bougie vs balloon dilations in terms of early and late complications occurrence
- Analyze epidemiological data to describe the EA
   population and evaluate AS incidence and identify risk
   factors for developing AS



#### follow-up comparative study



## **Inclusion criteria**

- Infants undergoing surgical repair of congenital EA
- EA patients referred for endoscopic assessment

# **Exclusion criteria**

- Patients with refractory/recurrent AS previously managed elsewhere
- Patients with insufficient medical histor SPGHAN information www.espghan.org





Anastomotic stricture after surgical repair of esophageal atresia: frequency, risk factors, and efficacy of esophageal bougie dilatations

Lydia Serhal, Frédéric Gottrand, Rony Sfeir, Dominique Guimber, Patrick Devos, Michel Bonnevalle, Laurent Storme, Dominique Turck, Laurent Michaud\*

Stricture resolution occurred after a mean of 3.2 ±1.74 dilatations per patient

Sample size of 150 patients (75 for each treatment group) could provide 80% power to detect a difference of 25% in number of dilations per patient with a CL 95% and

www.espghan.org

assuming the same SD





# Management of anastomotic strictures after esophageal atresia repair: results of a global survey

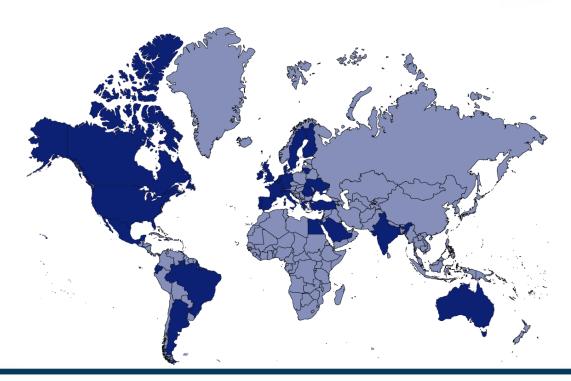
Chantal ten Kate (c.tenkate@erasmusmc.nl)

Renato Tambucci, Frédéric Gottrand, Rene Wijnen, Luigi Dall'Oglio

ESPGHAN Annual Meeting, Glasgow EA working group 05-06-2019



Management of anastomotic strictures after esophageal atresia repair: results of a global survey





# 110 centers

worldwide interested in partecipating



- 1. Universitair Ziekenhuis Gent (Gent, Belgio)
- 2. CHU Lille Pediatric Gastroenterology (Lille, France)
- 3. Hospital Italiano de Buenos Aires (Buenos Aires, Argentina)
- 4. Columbia University College (New York, USA)
- 5. Victor Babes University of Medicine and Pharmacy (Timisoara, Romania)
- 6. Hacettepe University Faculty of Medicine (Ankara, Turkey)
- 7. Istanbul Medeniyet University (Istanbul, Turkey)
- 8. Medical Universisty of Warsaw (Varsavia, Polonia)
- 9. Hospital de Emergencias Pediatricas (Lima, Perù)
- 10. Hospital General de Niños (Buenos Aires, Argentina)
- 11. Erasmus University of Rotterdam (Rotterdam, Paesi Bassi)
- 12. King Chulalongkorn Memorial Hospital (Bangkok, Tailandia)
- 13. Ca' Granda Ospedale Maggiore Policlinico (Milano, Italy)
- 14. Universidad Central de Venezuela (Caracas, Venezuela)
- 15. A.O.R.N. Santobuono-Pausilipon (Napoli, Italia)
- 16. CHU Saint Etienne Neonatology Unit (Saint Etienne, Francia)
- 17. CHU Toulouse Hôpital des enfants (Toulouse, France)
- 18. CHU de Rennes Endoscopy (Rennes, France)
- 19. CHU de Reims Pediatric Surgery (Reims, France)
- 20. Trousseau University Hospital Pediatric Surgery (Paris, France)
- 21. Robert-Debré Hospital Pediatric Gastroenterology (Paris, France)
- 22. CHU Angers Pediatric unit (Angers, France)
- 23. CHU Bordeaux Pediatric Gastroenterology (Bordeaux, France)
- 24. CHU Grenoble Pediatric Department (Grenoble, France)
- 25. CHU Besançon Pediatric Gastroenterology (Besançon, France)
- 26. CHU Brest Pediatric Surgery (Brest, France)
- 27. CHU Strasbourg Pediatric Gastroenterology (Strasbourg, France)
- 28. CHR Orléans Pediatric Surgery (Orléans, France)

- 1. Universitair Ziekenhuis Gent (Gent, Belgio)
- 2. CHU Lille Pediatric Gastroenterology (Lille, France)
- 3. Hospital Italiano de Buenos Aires (Buenos Aires, Argentina)
- 4. Columbia University College (New York, USA)
- 5. Victor Babes University of Medicine and Pharmacy (Timisoara, Romania)
- 6. Hacettepe University Faculty of Medicine (Ankara, Turkey)
- 7. Istanbul Medeniyet University (Istanbul, Turkey)
- 8. Medical Universisty of Warsaw (Varsavia, Polonia)
- 9. Hospital de Emergencias Pediatricas (Lima, Perù)
- 10. Hospital General de Niños (Buenos Aires, Argentina)
- 11. Erasmus University of Rotterdam (Rotterdam, Paesi Bassi)
- 12. King Chulalongkorn Memorial Hospital (Bangkok, Tailandia)
- 13. Ca' Granda Ospedale Maggiore Policlinico (Milano, Italy)
- 14. Universidad Central de Venezuela (Caracas, Venezuela)
- 15. A.O.R.N. Santobuono-Pausilipon (Napoli, Italia)
- 16. CHU Saint Etienne Neonatology Unit (Saint Etienne, Francia)
- 17. CHU Toulouse Hôpital des enfants (Toulouse, France)
- 18. CHU de Rennes Endoscopy (Rennes, France)
- 19. CHU de Reims Pediatric Surgery (Reims, France)
- 20. Trousseau University Hospital Pediatric Surgery (Paris, France)
- 21. Robert-Debré Hospital Pediatric Gastroenterology (Paris, France)
- 22. CHU Angers Pediatric unit (Angers, France)
- 23. CHU Bordeaux Pediatric Gastroenterology (Bordeaux, France)
- 24. CHU Grenoble Pediatric Department (Grenoble, France)
- 25. CHU Besançon Pediatric Gastroenterology (Besançon, France)
- 26. CHU Brest Pediatric Surgery (Brest, France)
- 27. CHU Strasbourg Pediatric Gastroenterology (Strasbourg, France)
- 28. CHR Orléans Pediatric Surgery (Orléans, France)

# Data of 11 patients are have been inserted into the database!!



# Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge study (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021 **49** 

# Endoscopic management of esophageal mucosal bridges in children followed for esophageal atresia

M. Antoine, F. Gottrand Hôpital Jeanne de Flandre, CHU Lille, France









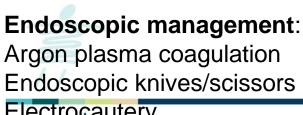
www.espghan.org

#### **Esophageal mucosal bridges (double-barrel esophagus)**

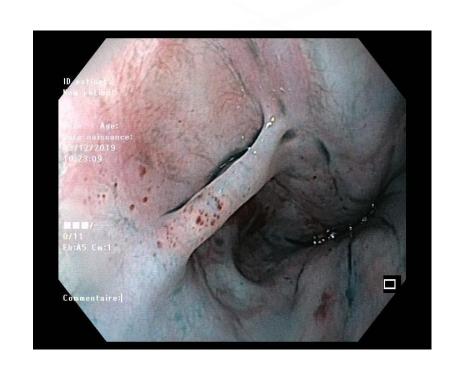
Rare entity, cause of dysphagia, food blockage Different etiologies: infections, inflammatory diseases, post-traumatic

**Esophageal atresia**: post-surgical, GERD, iatrogenic (nasogastric tube placement)

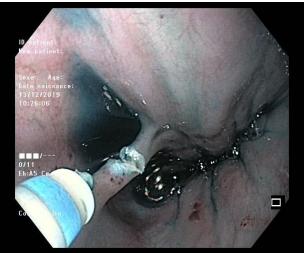
Endoscopic knives/scissors



Miniature staplers









Mucosal bridge

Endoknife (Dualknife 2mm)

Post section

#### Literature review

#### Only a few Case reported

**N=4 children** (with mucosal bridges at the site of esophaegal anastomosis followed for esophageal atresia) reported in **2 publications** :

- 3 treated with argon plasma coagulation (Chapuy and al., 2014)
- 1 treated with endoscopic miniature stapler (Kawano and Muensterer, 2019)

#### **Objectives** of the project:

- Collect a large number of cases at an international level
- Describe patients characteristics, mucosal bridges treatment, techniques, safety, efficacy and outcome

# Preliminary results....

**18 patients** in **9 centers** (France: Lille, Paris Robert-Debré, Lyon, Amiens, Orléans; Hannover; Vilnius; Sydney; Dubai)

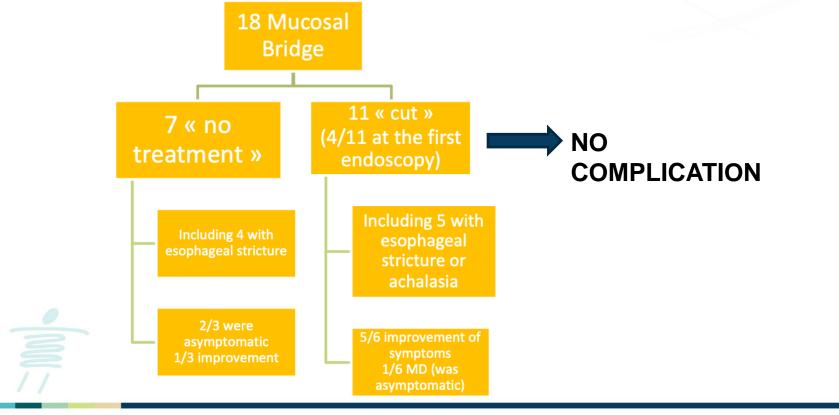
Mean age at diagnosis of mucosal bridge (MB):  $5.8 \pm 4.4$  yo (7 months – 13.8 years)

**GERD** (PPI 13/18, antireflux procedure 10/18)

Esophageal dilatations (13/18, >2 for 10/18)

No symptoms: 5/18

#### Preliminary results: treatment and outcome....



# Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

11.06.2021 56







October 2022	Saturday 8	Sunday 9	Monday 10	Tuesday 11	Wednesday 12	Thursday 13	Friday 14	Saturday 15	Sunday 16
Morning	1	3	5	7	9	11	13	15	17
	Dysphagia	Dysphagia	INOEA	INOEA	INOEA	Airway	Airway	Airway	Airway
	Course FEES	Course FEES	00000	00860	00860	7	, and a	Course	Course
	Course rees	0001301220	Dysphagia	Dysphagia	Airway	Aero	Aero	Dissection A	Dissection A
		EAT Family	-,-,		,				
		Day						Flex bronch Sim A	Flex Bronch Sim A
		INOEA / Ped Surg esophageal							
		dissection							
Afternoon	2	4 Dysphagia	6	8	10	12	14	16	18
	*	Course	INOEA	INOEA	INOEA	Airway	Airway	Airway	10
		Pharyngeal	00000	00000	00860	Airway	Allway	Course	
		manometry	Dysphagia	Dysphagia	Airway	Aero	Aero	Dissection B	
		EAT Family							
		Day							
		INoEA / Ped							
		Surg							
		esophageal							
		dissection							
Evening		Welcome	Faculty		Joint		Faculty		
		Cocktails	Dinner A		Conference		Dinner B		
					Banquet -				
			Or evening at		Union Terminal				
			the Zoo		/ Museum				
					Center				

THE CINCINNATI "QUAD" CONFERENCE: PROVISIONAL PROGRAM OVERVIEW

# Information Highlights





- Sessions will focus on interdisciplinary care
  - Pediatric to adult transitioning is an additional focus
- There will be breakout rooms for submitted papers
- We plan video poster boards
- The weekends either side of the conference will be for workshops and dissection courses
- There will be a competition for trainees
  - The prize will be 10 free registrations
- We can only accommodate 500 delegates
  - We will also be offering a virtual attendance option

# Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021 **6** 

#### **STEPS-EA trial**

Intralesional <u>STE</u>roid Injections to <u>Prevent Refractory Strictures in</u> Patients with <u>E</u>sophageal <u>A</u>tresia

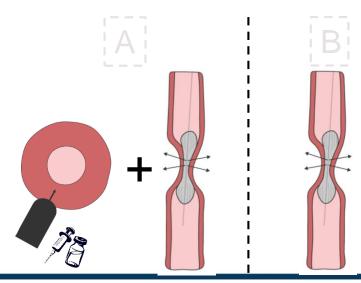
Rene Wijnen, project leader John Vlot, principal investigator

Anne-Fleur van Hal, coordinating investigator (steps.ea@erasmusmoni)



## **Quick recall**

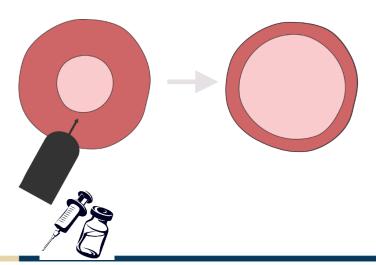
- Multicenter, single-blind randomized controlled trial.
  - → 1:1 randomization to injection with 10 mg/ml TAC (Kenacort-A 10) prior to balloon dilatation and balloon dilatation without any injection





# **Quick recall**

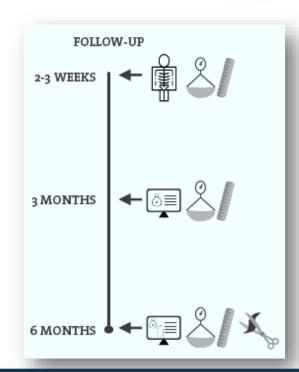
- Hypothesis: ↓ formation of collagen, ↑ breakdown of collagen, ↓ fibrotic healing
  - > inhibition of scar formation
  - > stenosis will not recur





# **Quick recall**

- Three main objectives:
  - Effectiveness
  - Safety
  - Cost-effectiveness







### Where do we stand now?

- Grant from Sophia Foundation
  - Each center will receive €750,- per inclusion
- Inclusions N=4 Goal: N=110
- Three centers up and running, waiting for inclusions
  - Norway and France received ethical approval, starting in summer
- Still open for new participating centers if interested!



## Road to success







# **STEPS-EA** trial

Network
 Inherited and Congenital
 Anomalies (ERNICA)

steps.ea@erasmusmc.nl



www.espghan.org

# Agenda

- Introduction: what is going on in the EA planet (ERNICA, INoEA, Covid...) (Frederic Gottrand)
- Update on the EoE register in EA patients: current status of agreemnts and inclusion; preliminary results of the first 45 cases (Frederic Gottrand, Usha Krishnan, Katialine Groff)
- Progress of Transition consensus (Usha Krishnan)
- Comparison of Balloon and Savary dilalation study: current status (Renato Tambucci)
- First results of the mucosal bridge (Matthieu Antoine)
- Announcement of the next world congress on EA in Cincinnati Oct 10-14 2022 (Mike Rutter)
- Update of the STEPS-EA trial (Anne-Fleur van Hal)
- Other project/proposal (?)

www.espghan.org 11.06.2021 **6**7