Workshop on: Listing Indications and wait list prioritizations criteria for patients needing an intestine containing grafts

Coordinators: Rodrigo Vianna, Gabriel Gondolesi.

Moderators for Indications: Yaron Avitzur, Rodrigo Vianna

08:00-10:00 Current definitions/indications, introduction of points to be discussed and modify for improvement. Each presenter will have 20 minutes.

08:00-08:20: Intestinal failure: Definition and goals of rehabilitation (Children/Adult)
   (20 min presentation, 10 min each)
   - Jennifer Garcia - USA - Peds.
   - Jonathan Hind - UK - Adults.

08:20-8:40: Referral for transplant evaluation – timing and criteria
   (20 min presentation, 10 min each)
   - Stuart Kaufman - US - Peds.
   - Simon Gabe - UK - Adults.

08:40-09:00: Current indications for None liver containing grafts (Isolated/Mod. MTV)
   (20 min presentation)
   - Hector Vilca Melendez - Peds and Adults - UK - Peds.

09:00-9:20: Current Indications fro Liver containing grafts (Combined liver-Intestine and Multivisceral transplant) (Children/Adult)
   (20 min presentation)

[9:20 to 10:20] review of the Delphi consensus and proposal for the “White Paper” and Open discussion to start answering the questions presented by each speaker in order.

(10:20 to 10:40 Coffee Break)
Moderators: Rob Venick, Gabriel Gondolesi

10:40 - 12:40 Current challenges at the time of evaluation, introduction of points to be discussed and modify for improvement. Each presenter will have 20 minutes.

10:40-11:00: Current Role of DSA at the time of listing a patient for any intestinal containing graft.
   (20min presentation)
   - Cal Matsumoto - US - Adult and Peds.

11:00-11:20: Current role of Interventional Radiology at the time of listing a patient for any intestinal containing graft.
   (20 min presentation)
   - George Mazariegos - US - Adults and Peds.

   (20min presentation + 10min discussion)
   - Rob Venick - US - Adults and Peds.

[11:40 to 12:40] review of the Delphi consensus and proposal for the “White Paper” and Open discussion to start answering the questions presented by each speaker in order.

(12:40 to 13:30 Lunch Break)

Moderator: Rodrigo Vianna and Robert Venick

13:30-14:30: Current Allocation Models Worldwide, deficiencies and opportunities.
   - Europe (10min)- Lisa Sherkay - UK
   - Asia (10min)- Taizo Hibi - Japan
   - Middle East (10 min) - Iran (Zoom)
   - US (10min) - Shunji Nagai - US
   - South America (10 min)- Gabriel Gondolesi - Argentina
   - Oceania (10 min)- Helen Evans - NZ

14:30 to 14:50: Novel or future determinations that might impact on Allocation: NOD2 Mutation, HLA matching, others.
Laurence Ceulemans - Belgium

13:15-13:45: Impact of cost as a variable to be include in indications.
  (10min presentation + 5 min discussion each)
  o Vikram Raghu - US.
  o Emilio Canovai - UK.

[13:45 to 14:30] review of the Delphi consensus and proposal for the “White Paper” and Open discussion to start answering the questions presented by each speaker in order.

(14:30 to 15:00 Coffee Break)

15:00-16:00 review of the Delphi consensus and proposal for the “White Paper” and proposal for a novel allocation bowel model.
  o Rodrigo Vianna and Yaron Avitzur
DELPHI CONSENSUS

How to do it:

- Step 1: Choose Facilitator: Phillipe Abreu
- Step 2: Identify the experts (around 10-20): All the invited for the workshops.
- Step 3: Define the problem:
  - Current definitions/indications, introduction of points to be discussed and modify for improvement.
  - Current challenges at the time of evaluation, introduction of points to be discussed and modify for improvement.
  - Current Allocation Models Worldwide, deficiencies and opportunities.
- Step 4: Round 1 statements to be answered. (Include your evidence based reference).
- Step 5: Act on your findings
- Step 6: Conclusions.

Answers:
Strongly Agree
Agree
Disagree
Strongly Disagree
Don’t know.

Round 1 Statements:

1) In the pediatric population, if patients that are not progressing towards enteral autonomy, the maximum time for intestinal rehabilitation should be less than 5 years.

2) In the adult population, in patients that are not progressing towards enteral autonomy, the maximum time for intestinal rehabilitation should be less than 1 year.

3) Pre-emptive intestinal transplantation - should it be considered in pediatric patients with ultra-short-gut syndrome (less than 10cm small bowel from ligament of Treitz).

4) Preemptive intestinal transplantation - should it be considered in adult patients with ultra-short-gut syndrome (less than 40cm small bowel from ligament of Treitz).

5) Preemptive intestinal transplantation should be considered in patients with MMIHS.

6) Preemptive intestinal transplantation should be considered in patients with total aganglionosis.

7) Preemptive Intestinal Transplantation should be considered in patients with tufting
enteropathy - diffuse mucosal disorders.

8) Preemptive intestinal transplantation should be considered in patients with CIPO (adults and Peds).

9) Patients with dysmotility should always receive a modified multivisceral transplant (stomach, duodenum, pancreas, small bowel, colon).

10) Patients with dysmotility should always receive an isolated intestinal transplant with gastro-enteric anastomosis.

11) Intestinal rehabilitation programs should screen for panel reactive antibodies yearly.

12) Sensitisation of intestinal failure patients should be included as one of the criteria for listing for transplantation.

13) The development of MDROs should be included as one of the criteria for listing for transplantation.

14) Diffuse Grade IV Portomesenteric thrombosis is an indication for multivisceral transplant.

15) Isolated Liver transplant is contra-indicated in Diffuse Grade IV portomesenteric thrombosis, but appropriate for Diffuse Grade III.

16) In partial portal vein thrombosis, IR intervention should always be attempted.

17) Benign or low-grade tumors invading the root of the mesentery can be treated with multivisceral transplant.

18) Diffuse Neuro-Endocrine Tumors limited to the abdominal cavity can be treated with multivisceral transplantation.

19) Abdominal catastrophe with frozen abdomen/Cocoon Syndrome are an indication for multivisceral transplant.

20) Multiple entero-cutaneous fistulas failing surgical repair is an indication for intestinal transplantation.

21) Intestinal transplant should only be indicated for short bowel syndrome if patients are not well adapted to home PN.

22) Liver biopsies showing Grade III bridging is and indication for isolated intestinal
transplant.

23) For short bowel syndrome patients with irreversible liver disease, multivisceral transplant should be preferred over isolated liver transplant.

24) Long-term home PN is a risk for the development of DSAs in short bowel syndrome patients.

25) Patients with PRAs should be prioritized in the wait-list and organ allocation.

26) High level of PRAs is an indication for multivisceral transplantation even in the setting of stable liver function.

27) Patients should be screened for NOD2 mutation as part of the listing workup.

28) HLA matching should be included in the allocation system for intestinal transplant, as part of priority criteria.

29) Surveillance Upper and lower extremity doppler US should be performed yearly by intestinal rehabilitation programs.

30) Surveillance CT/MRV should be performed by intestinal rehabilitation programs yearly if the patient has had a central venous line exchange.

31) MRV should be part of the intestinal transplant workup in adjunction to US doppler tests.

32) Less than 2/4-6 conventional venous access remains as the primary indication for intestinal transplant.

33) The need for none-conventional access remains a major contraindication for intestinal transplant.

34) Quality of life should be considered when deciding between home PN or transplantation.

35) Patients with none-compliance identify during Home PN care, are at higher risk for failure after transplant.

36) Patients with intestinal failure should be managed by a multidisciplinary team in association or consultation with an intestinal transplant center.

37) Modified multivisceral grafts should have priority over kidney-pancreas grafts.
38) Definitions for donor vascular techniques to split liver and modified multi-visceral should be known and defined at the time of allocation and not in the OR to benefit both grafts.

39) Persistent renal dysfunction (GFR <40 ml/min), in the setting of intestinal Failure is an indication for double grafts evaluation.

40) Patients in need of liver-inclusive grafts should be prioritized over liver-only grafts in the allocation system (with exception of the Status 1A and 1B).

41) Preemptive intestinal transplant patients should be prioritized on the organ allocation list.

42) Intestinal transplant without ostomy should be attempted when possible.

43) Intestinal grafts should be removed before listing in the setting of chronic allograft rejection.

44) Intestinal grafts should be removed before listing in the setting of chronic allograft rejection when patients suffer from recurrent sepsis.