Gastroschisis Prognostic Score GPS

Matting	None (0)	Mild (1)	Severe (4)
Atresia	Absent (0)	Suspected (1)	Present (2)
Perforation	Absent (0)		Present (2)
Necrosis	Absent (0)		Present (4)

Limitations:

- 1. Severe matting intermediate.
- 2. Extent of bowel loss.
- 3. Rare forms of gastroschisis







Gastroschisis Severe Matting







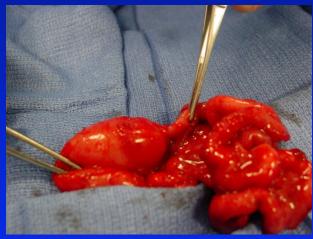




Intestinal Complications Most Important Outcome Determinant





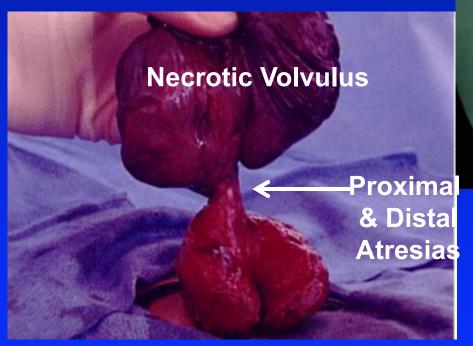


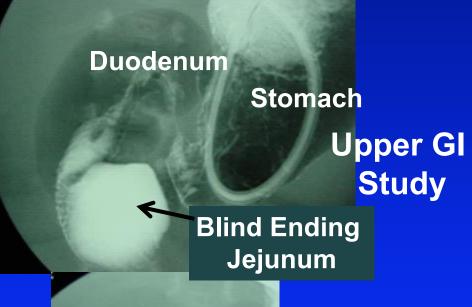






Gastroschisis with Midgut Volvulus





Blind Ending Colon

Contrast Enema







Liver Herniation









@Birth









Silo Reduction

- 7.5 cm silo
- Reduction over 10 days
- Problems with Silo stability
- Achieved near complete liver reduction.





Alloderm and VAC Closure DOL 11









Alloderm Shaving 2 Weeks Post Closure











Gangrenous Bowel Loop Discovered



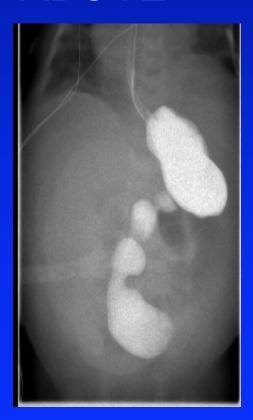






Contrast Studies

ABOVE



BELOW









Following Six Weeks

- Multiple Episodes of Sepsis
- Multiple Episodes GI Bleeding
- Deteriorating Liver Function





Montreal Children's

McGill University

Health Centre

Hospital





- 3 month of age (8 weeks corrected)
- Multidisciplinary Preparation
 - NICU
 - Surgery
 - -GI
 - Hematology
 - Anesthesia









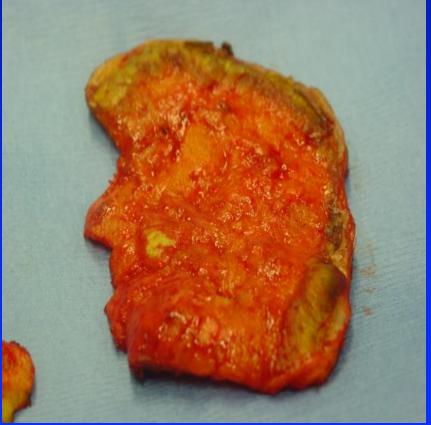






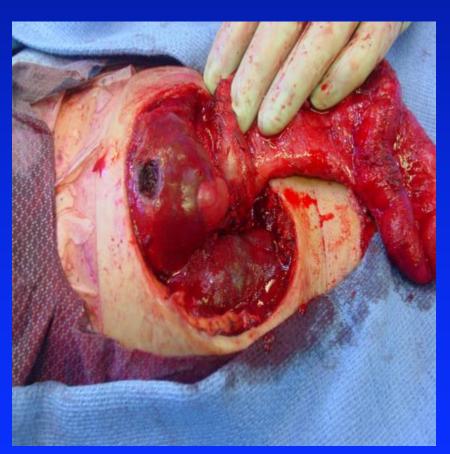


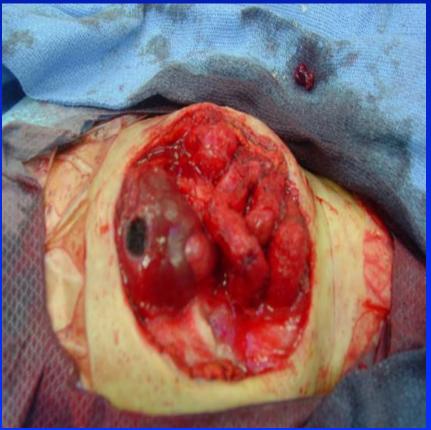






















Post Operative Course

- 12 hour honeymoon period
- SIRS
 - Hypotension
 - Renal Failure
- CRRT considered
- Onset of seizures POD 2
- MRI showed evidence of severe brain injury POD 3
- Deceased POD 4





Complex Gastroschisis Closing Gastroschisis





Triad

- Very narrow defect
- Proximal and distal atresias
- Compromise of exterior intestines
- Effect on Outcomes
 - 1/3 of complex GS
 - 2/3 of SBS cases

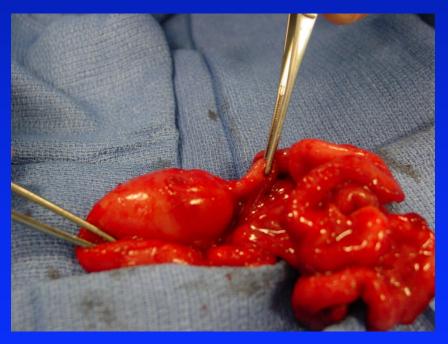






Complex Gastroschisis Closing Gastroschisis









Complex Gastroschisis Closing Gastroschisis

Journal of Pediatric Surgery (2009) 44, 343-347



Journal of
Pediatric
Surgery

Closing gastroschisis: diagnosis, management, and outcomes

Chris Houben^{a,*}, Mark Davenport^a, Niyi Ade-Ajayi^a, Nicki Flack^b, Shailesh Patel^a

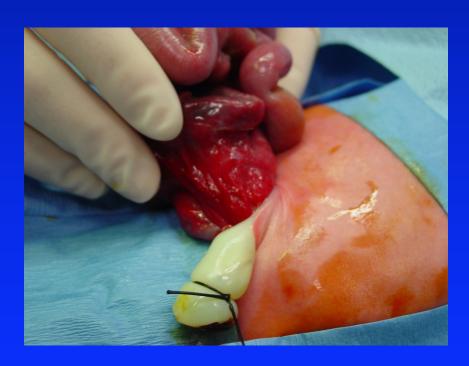
^aDepartment of Paediatric Surgery, King's College Hospital, SE5 9RS London, United Kingdom ^bHarris Birthright Centre for Fetal Medicine, SE5 9RS London, United Kingdom May be diagnosed with combination of intra-abdominal bowel dilation and extra-abdominal bowel shrinkage.

Early delivery advantageous.





Closing Gastroschisis Bowel Salvage









Complex Gastroschisis **Strategies**

- Customized closure.
- Address bowel perforation and necrosis immediately.
- Establish bowel continuity as early as possible.
- Preserve maximal bowel length.
- Address dilated bowel.
- Use contrast studies to delineate anatomy.
- Early gastrostomy for short bowel syndrome.
- Early use of liver-protective TPN formulations.

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Surgical strategies in complex gastroschisis

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ARTICLE INFO

Castroschisis Complex Surgery

Currently, the most important determinant of gastroschisis outcomes in high resource settings is whether the condition is associated with intestinal complications, such as atresia, necrosis, perforation, or volvulus, This form of the anomaly, known as complex gastroschisis, accounts for most of the mortality and a disproportionate burden of the morbidity from gastroschisis. There is some disagreement about what constitutes complex gastroschisis, and little consensus on the type and timing of surgical interventions. This article establishes a clear definition of complex gastroschisis. Surgical approaches to treatment of the diverse presentations of complex gastroschisis will be described and the timing of such interventions will be discussed. Contemporary outcomes of complex gastroschisis will be reviewed. Finally, a non-congenital intestinal complications that may arise in gastroschisis patients will be discussed.





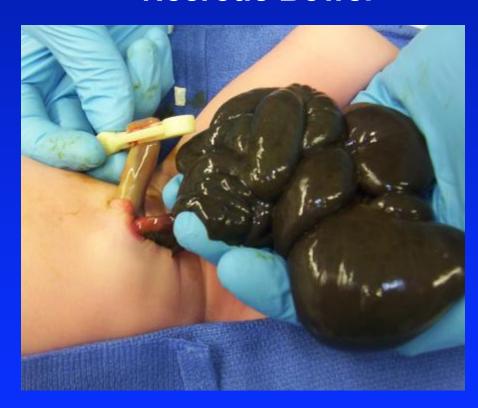


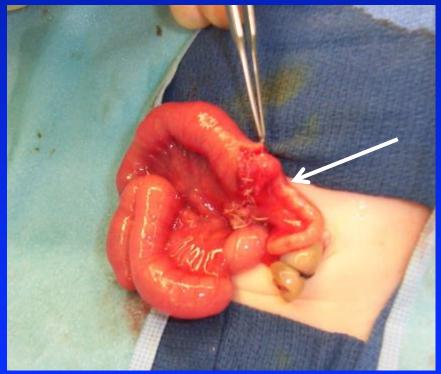


Closing Gastroschisis

Necrotic Bowel

Jejunocolic Anastomosis
After Resection











Complex Gastroschisis **Contemporary Outcomes**

Survival to Discharge

Simple 97 %

Complex

Two Year Outcomes

– Survival: 82 %

– Nutritional Status:

• Full Oral 82 %

• Oral / GT 12 %

Oral/GT/TPN 6

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Contemporary 2-year outcomes of complex gastroschisis

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here are two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle.

Albert Einstein (1879-1955)



