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SURGICAL OUTCOME OF EXTENDED HEPATECTOMY FOR CHILDHOOD HEPATOBLASTOMA

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INTRODUCTION



- ▶ Surgical resection of hepatoblastoma in children is **essential for a cure**
- ▶ Partial hepatectomy in children is a complex procedure and associated with **high complication rates**

INTRODUCTION



- ▶ Busweiler et al. (Netherlands) (n=103 over 24years)
 - ▶ 17% (n=18) liver transplantation
 - ▶ 74% (n=76) partial hepatectomies (44.7% extended)
 - ▶ **58% complication rates** following partial hepatectomy
 - ▶ Hemorrhage necessitating blood transfusion (45%)
 - ▶ Biliary complications (12%)
 - ▶ Infection (8%)
 - ▶ Vascular complications (3%)
 - ▶ Early postoperative mortality: none

INTRODUCTION



- ▶ In our country, availability for liver transplantation is limited
- ▶ **Extended hepatectomy** is our **option for all hepatoblastoma with extensive tumor involvement** (PRETEXT III / POSTEXT III)

OBJECTIVES



- ▶ To review surgical outcomes of extended hepatectomy for childhood hepatoblastoma
 - ▶ Postoperative complications
 - ▶ Postoperative outcome

METHOD



▶ Study design

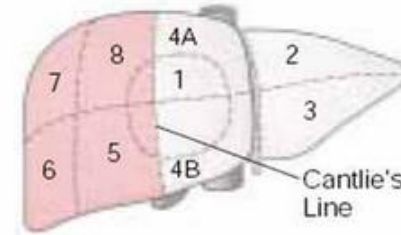
- ▶ Retrospective: year 2010 to 2016 (7 years duration)

▶ Sample

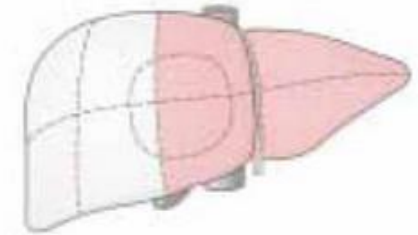
- ▶ All patients with hepatoblastoma who underwent extended hepatectomy

HEPATIC RESECTION

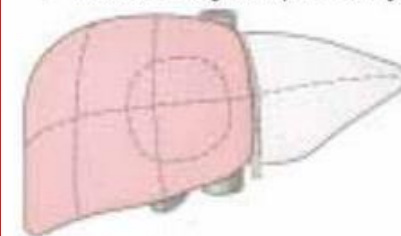
a Right Lobectomy



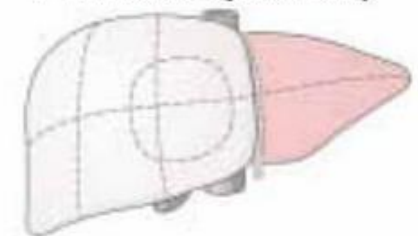
b Left Lobectomy



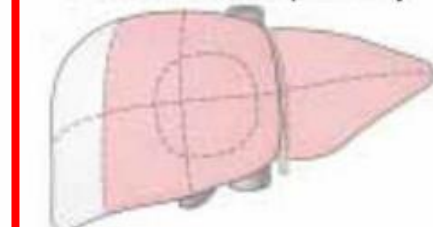
c Extended Right Hepatectomy



d Left Lateral Segmentectomy



e Extended Left Hepatectomy

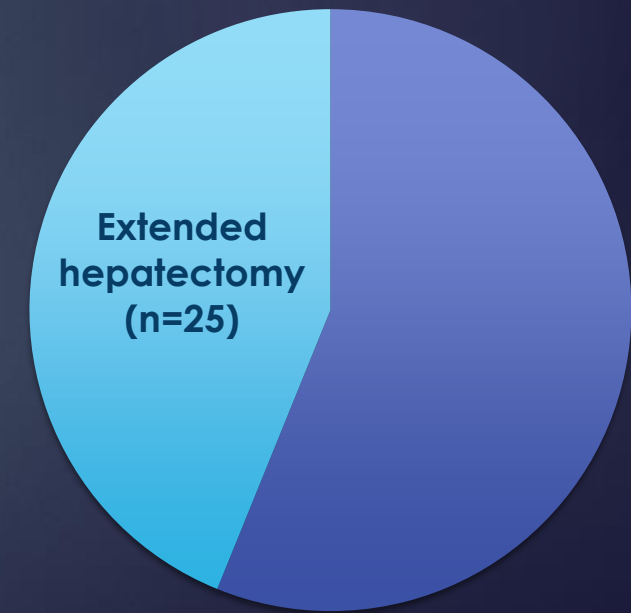


RESULTS



- ▶ **Over the 7 years period,**
 - ▶ Hepatectomies: **57**
 - ▶ Extended hepatectomy: **25 (43.9%)**
 - ▶ **24** included in the study (*one emergency EH for bleeding post biopsy was excluded*)
 - ▶ 7 had caudate lobectomy

Liver resection for hepatoblastoma



RESULTS



Category	Number	%
Gender		
Male	10	42%
Female	14	58%

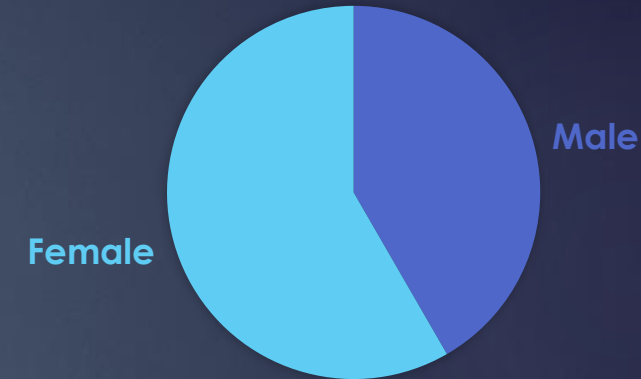
Age (months)

Mean 35m

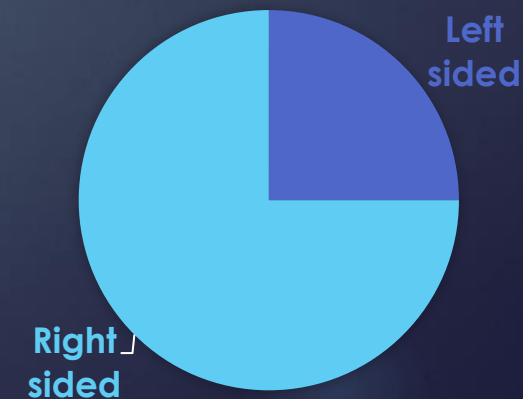
Median 20m

Side of resection		
Right sided EH	18	75%
Left sided EH	6	25%

GENDER



SIDE OF RESECTION



Perioperative complications



▶ 11 patients (45.8%) had one or more complications

Complications	n (%)	Remarks
Biliary complications	10 (42%)	7 bile leaks (5 conservatively / 2 surgery) 3 biliary stricture (all had bilio-enteric anastomosis)
Major hemorrhage	4 (16.6%)	<ul style="list-style-type: none">• All patients required intraoperative blood transfusion• 4 patients had major hemorrhage<ul style="list-style-type: none">• 2 major intraoperative life threatening hemorrhage• 2 major postoperative hemorrhage (reoperation)
Early postoperative death	2 (8.3%)	Died following major hemorrhage
Liver insufficiency	none	
Surgical site infection	none	

Perioperative outcome



Outcome	n (%)	Remarks
Free resected margin	20 (83.3%)	<ul style="list-style-type: none">Involved margin: 2 (8.3%)Missing data: 2 (8.3%)
Local recurrence	1 (4.2%)	Free resected margin

CONCLUSION



- ▶ Extended hepatectomy in children is associated with high complication rates (46%) in which most are not life threatening
- ▶ In a country where availability for liver transplantation is limited, extended hepatectomy offers a chance of survival among hepatoblastoma cases with extensive tumor involvement



Terima Kasih
THANKS...