

# THE EFFICACY OF TREATMENT OF LOCAL RESIDUAL NEOPLASIA UNDER STANDARDIZED CONDITIONS

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Any author has no conflict of interest



# Laterally spreading (type) tumors (LSTs)

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- LSTs are superficial flat elevated (0-IIa) neoplastic lesions with diameter  $\geq 10\text{mm}$
- In the absence of sm neoplastic invasion, there is no risk of lymph node metastasis
- Endoscopic resection has replaced surgery as first line treatment modality

# Local residual neoplasia (LRN)

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- LRN is defined as presence of neoplastic tissue in the biopsy from post-endoscopic resection site
- Reported occurrence of LRN after EMR is 15 (5-55)%
- *Piecemeal* resection is the main risk factor
- LRN may develop into the invasive cancer

# Treatment of local residual neoplasia

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- Endoscopy (APC, re-EMR, ESD)  
Metaanalysis (351 LRNs, APC, re-EMR)  
79 % could be eradicated in one session
- Surgery  
1 % of lesions initially considered adequate for EMR

No prospective studies of LRN treatment under standardized conditions have been published yet

# Aims of the study

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to evaluate the efficacy of LRN treatment under standardized conditions in patients after EMR of LSTs

# Study setting

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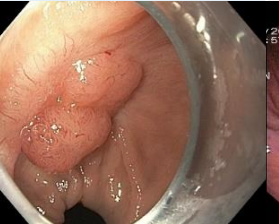
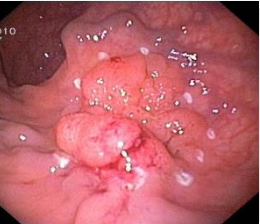
- Design: Prospective interventional
- Inclusion period: 10/2013- 9/2014
- Sites: Two centers in the Czech Republic
- Ethics: Ethics committee at Vitkovice Hospital
- Registration: ClinicalTrial.gov NCT02386618
  
- Inclusion: All consecutive patients referred for LRN treatment
- Exclusion: Incomplete therapy of original lesion  
Previous LRN therapy attempt

# Methods

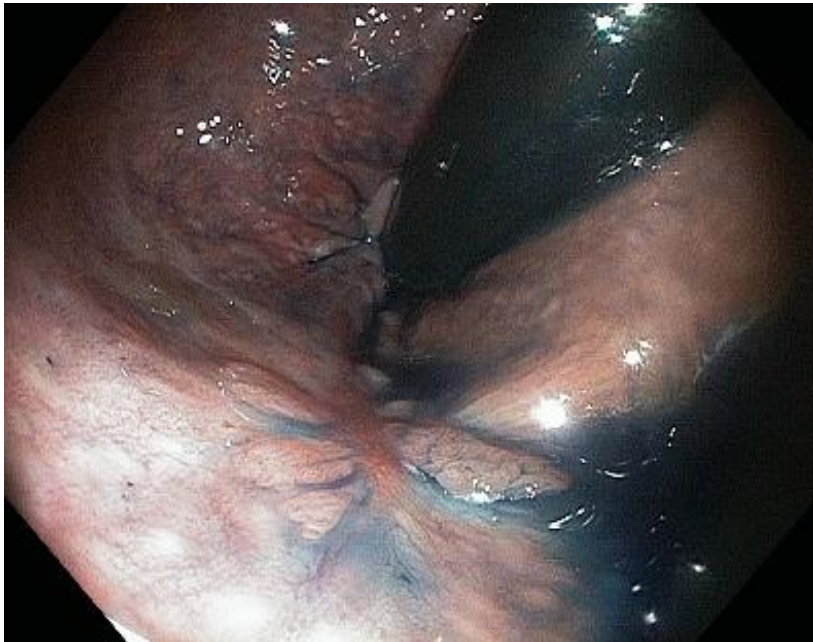
t=0	<b>Initial colonoscopy (treatment of LST)</b>
	Complete resection- follow up Incomplete resection - exclusion
t= 3m	<b>1st follow-up colonoscopy</b>
	<b>Positive for LRN- INCLUSION TO THE STUDY</b> LRN classification LRN treatment
t=9m	<b>2nd follow-up colonoscopy (LRN treatment assessment)</b>



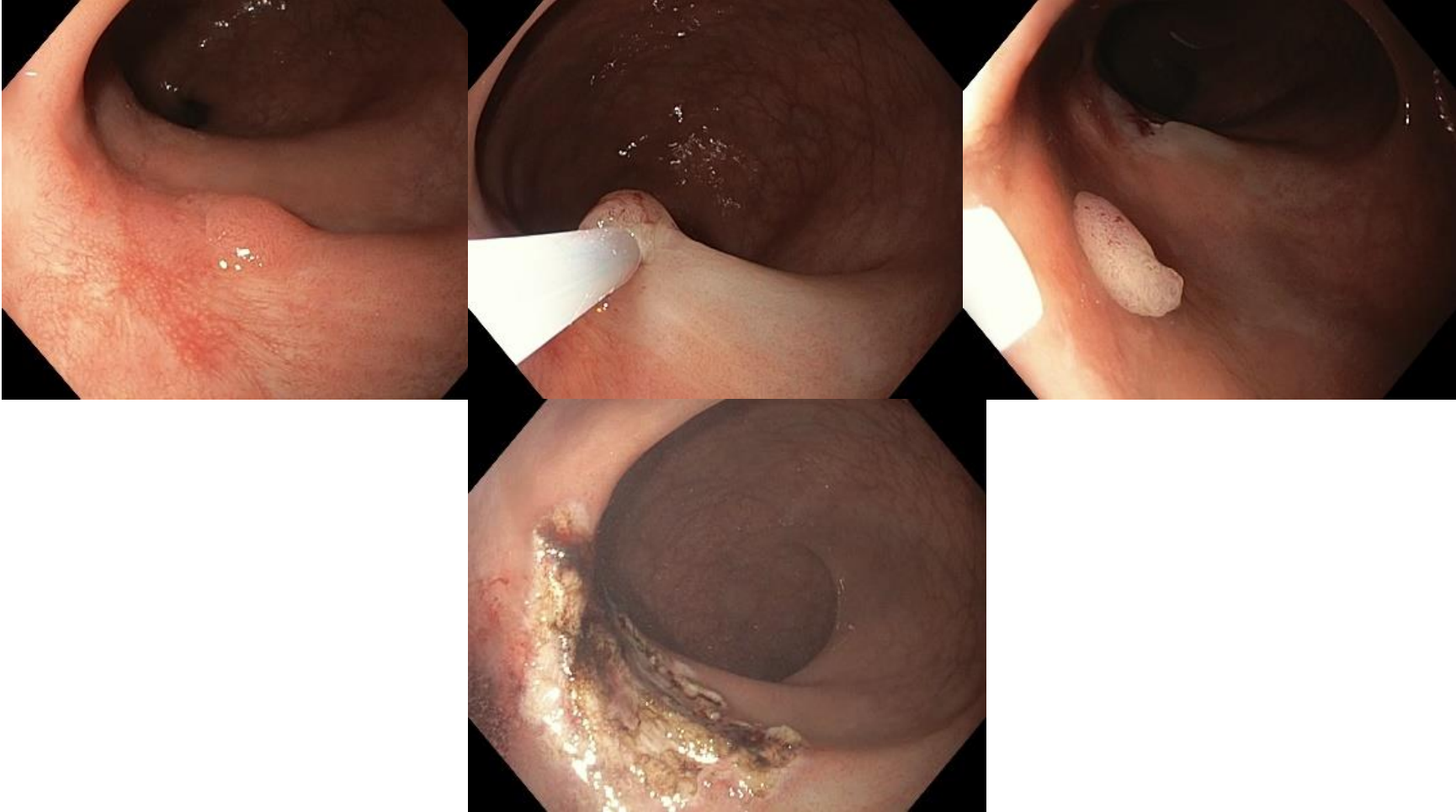
# Proposed endoscopic classification of LRN and corresponding treatment

Type	A	B	C	D	E
					
Endoscopic characteristics	Normal post-EMR site	≤ 5mm	> 5mm Non-lifting negative	> 5mm Non-lifting positive	Complex
Corresponding treatment	APC	APC	Re-EMR	ESD	Surgery

# Type B LRN treatment by APC

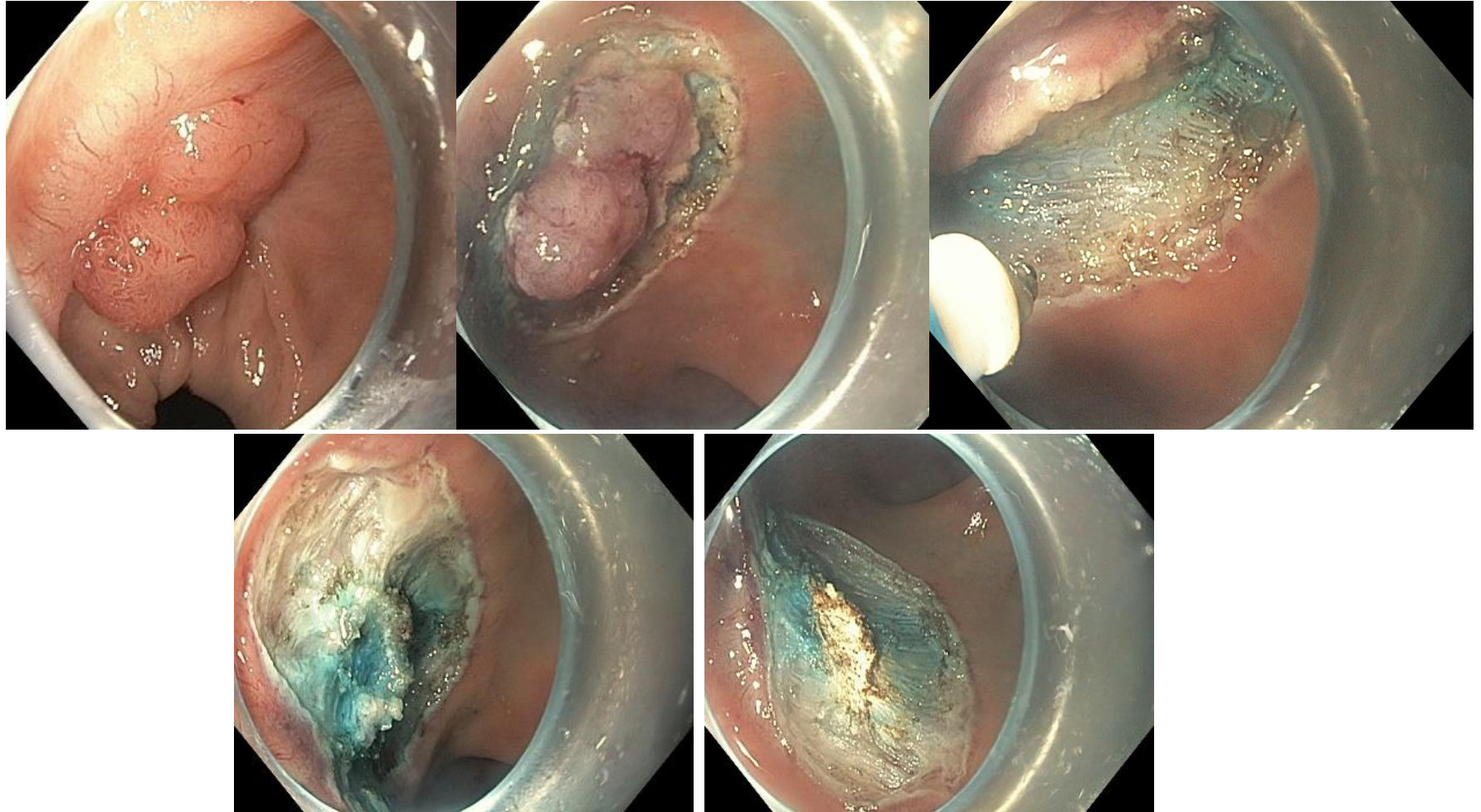


# Type C LRN treatment by re-EMR and APC





# Type D LRN treatment by ESD



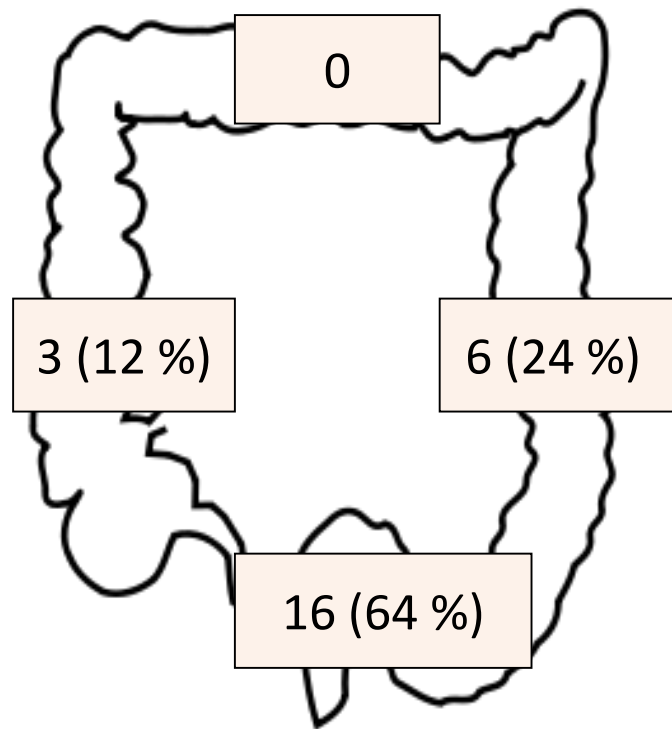
# Demographic and clinical characteristics (n=25)

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- Age (mean±SD) 69.3 ± 13.8
- Gender (M/F) 10/15
  
- Size of original LST
  - 10-19 mm 1 (4 %)
  - 20-29 mm 6 (24 %)
  - ≥ 30 mm 18 (72 %)
  
- Histology of original LST
  - LGIEN 6 (24 %)
  - HGIEN 14 (56 %)
  - Intramucosal cancer 5 (20 %)

# LRN location and histology (n= 25)

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LGIEN 12 (48 %)  
HGIEN 13 (52 %)

# Results of LRN treatment after 6 months

LRN type	A	B	C	D	E	Σ
n	0 (0 %)	12 (48 %)	8 (32 %)	5 (20 %)	0 (0 %)	25 (100 %)
Lost from FU		1*		1**		2 (8 %)
LRN negative		10 (90.9 %)	7 (87.5 %)	4 (100 %)		21 (91.3 %)
LRN positive		1	1	0		2 (8.7 %)

\* Mental problems \*\* Warfarin treatment

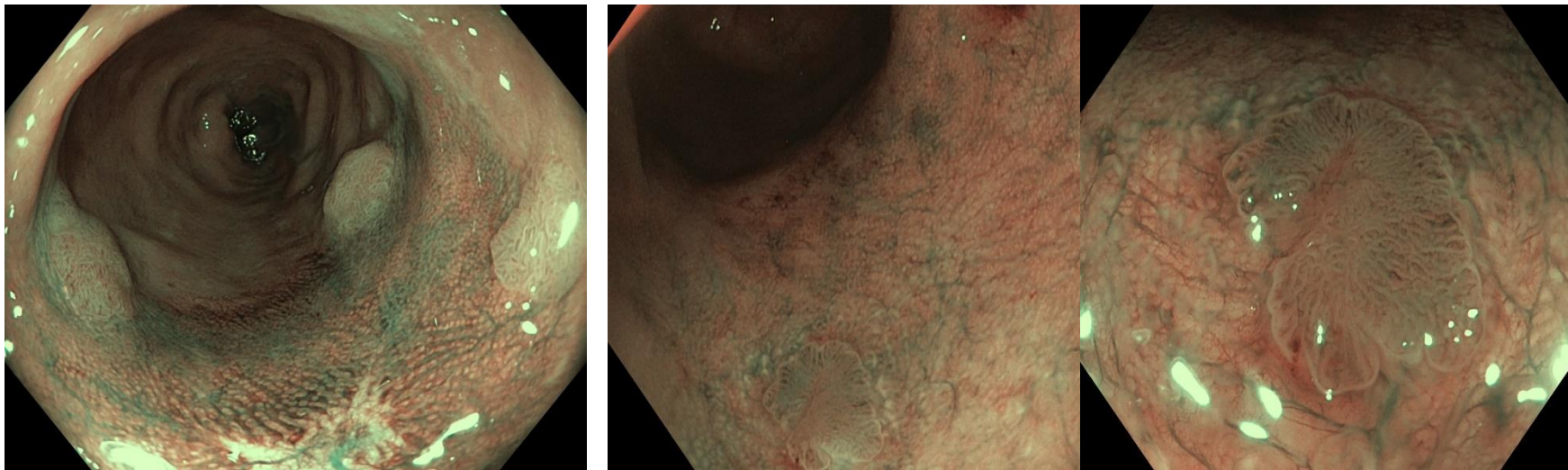
# Complications and LRN treatment failures

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- No mortality
- No perforation, severe and/or delayed bleeding
- Treatment failure in 2 (8.7 %) cases of LRN
  - (1) APC of type B
  - (2) Re-EMR of type C



# Treatment failure



# Discussion

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In our previous study

- The occurrence of LRN after 15 months was 20.3 %
- LRN treatment was complete in 8/17 (47.1 %)
- Lack of standardization and using mostly APC for LRN treatment suggested as possible causes

# Limitations

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- Limited number of patients
- Only 6 months of follow- up after LRN treatment
- Bicentric study design

# Conclusions

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In our study, eradication of LRN after EMR of LST was achieved in 91.3 % during one treatment session

Selection of treatment modality according to the LRN type may be useful

Further studies with larger number of cases and longer follow up are needed

# Acknowledgement

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