

# Pengaruh grading kolagen pada batas reseksi usus dengan kebocoran anastomosis pada kasus intususepsi uji eksperimental hewan coba tikus = The effect of collagen grading on the extent of resection with anastomose leakage on intussusception experimental est on rat

Budi Pratama Arnofyan, author

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## Abstrak

**ABSTRAK**  
Latar Belakang : Angka kejadian reseksi anastomosis pada kasus intususepsi masih sangat tinggi. Hal ini dikarenakan masih seringnya pasien datang terlambat setelah 72 jam, kurangnya SDM untuk melakukan reduksi non operatif, dan kurangnya penunjang seperti USG untuk menegakkan diagnosa. Penting untuk memperhatikan presisi, tehnik dan mempertimbangkan usus yang tersisa dalam melakukan reseksi anastomosis. Hingga saat ini belum ada standar operasi khusus yang dapat menjadi panduan bagi para dokter bedah dalam melakukan reseksi akibat intususepsi. Karena itu, peneliti tertarik untuk mencari batas reseksi yang diperlukan untuk menghasilkan suatu anastomosis end-to-end yang optimal dan rendah tingkat kebocorannya. Penelitian akan dilakukan kepada tikus sebagai pilot study sebelum dilakukan penelitian lebih lanjut.

Tujuan : Mengetahui batas reseksi usus yang optimal dinilai dari kebocoran anastomosis berdasarkan grading kolagen pada batas reseksi tersebut.

Metode : Penelitian ini merupakan penelitian eksperimental dengan hewan coba tikus putih Sprague Dawley. Tikus putih dilakukan intususepsi dengan menggunakan stylet, dari proksimal ke distal. Setelah 45 menit, intususepsi di reduksi. Tikus putih dikelompokkan dalam tiga kelompok sesuai batas reseksi anastomosis, yang kemudian batas reseksi ini dilakukan pemeriksaan grading kolagen. Setelah 5 hari, dilakukan laparotomi untuk menilai kebocoran anastomosis.

Hasil : Pada perbandingan grading kolagen dengan reseksi usus didapatkan grading terbanyak pada batas 1 adalah grading 2 (57,1 %), pada batas 2 grading 2 (71,4 %), batas 3 grading 3 (71,4%). Perforasi terbanyak ditemukan pada grading 2 sebanyak 5 sampel. Pada perbandingan batas reseksi dengan perforasi didapatkan perforasi terbanyak pada batas 1 (85,7 %)

Simpulan : Terdapat perbedaan grading kolagen pada batas reseksi usus dimana batas kelompok batas 3 memiliki grading kolagen yang lebih baik ( grade 3 dan 4) sehingga kelompok batas 3 lebih direkomendasikan secara histopatologis.

Grading kolagen dapat dinilai untuk melihat kemungkinan perforasi hasil anastomosis. Terdapat faktor-faktor lain yang dapat mempengaruhi kejadian perforasi selain grading kolagen. ;Background **ABSTRACT**  
There is still high presentation of intussusception cases with resection and anastomose, caused of multi factors as : patient delay more than 72 hours, less on

professional expert to do non operative reduction and less of examination such as ultra sound to make a diagnose. That is important to take attention with pretition, tehniques and less of intestine when do the resection. There is still no operative standard about the boundary of resection cause of intussuseption, thats why the author want to do the experimental to find the optimal part of resection with minimal leakage. The experimental will do on rat as a pilot study.

Aim : How to get the optimal part of resection compared with anastomotic leakege based on collagen grading.

Method : The experimental test using a Sprague Dawley rat. We make a intussuseption on gut rat using a styleth from proximal to distal. The release do after 45 minutes. The rats then separated into three boundaries group, and did resection-anastomose with each gut from groups were performed a histopatologic test to count collagen grading. Leakage of anastomose were examined after 5 days

Result : In comparison between collagen grading and the extent of resection obtained the highest grading in group 1 is grade 2 (57,1%), group 2 is grade 2 (71,4%), group 3 (71,4%). The highest Leakage can be found on grade 2 (5 sample).in comparison the extent of resection and leakage,the highest is group 1 (85,7%).

Summary : There are differences about collagen gradingin the extent of bowel resection which is the third group of resection has higher collagen grading (3 and 4 ) and then more recommended as histopatologic exam. Collagen grading could be marked to see possibilities of anastomotic leakage. There is some factors that affect a leakage besides collagen grading. ;Background : There is still high presentation of intussuseption cases with resection and

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