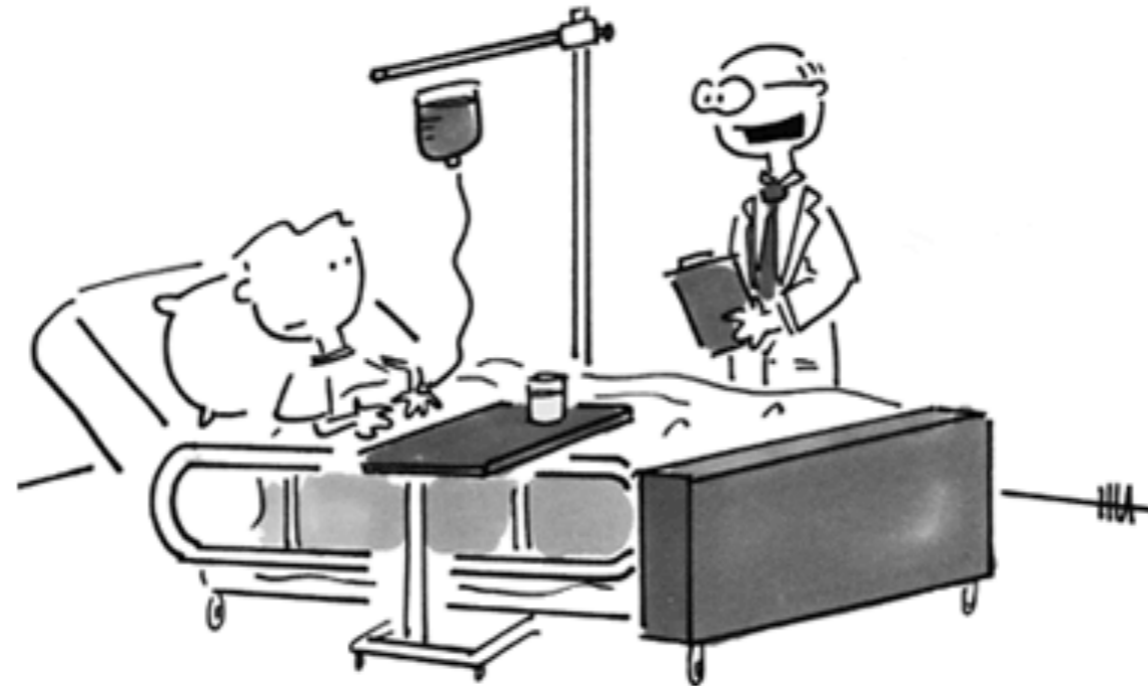




OA DR. STRUTZMANN JOHANNES

APPENDIZITIS

TIME FOR A SECOND OPINION



"So, is this your first appendectomy?"

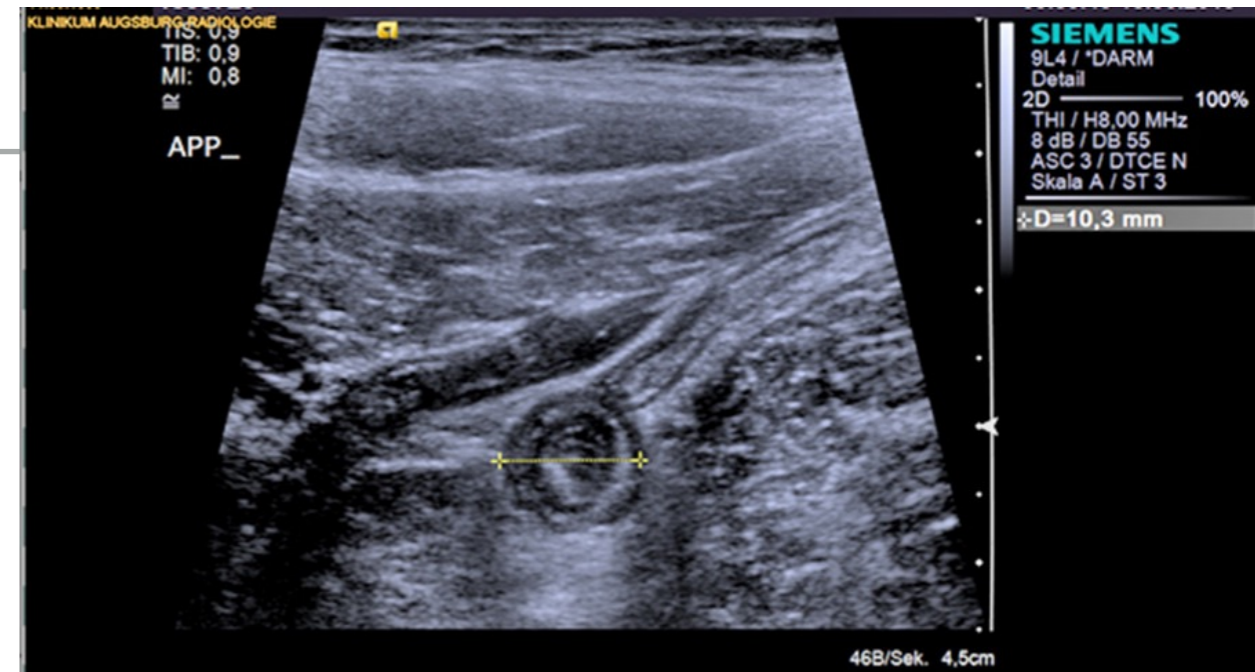
LKH WOLFSBERG / KÄRNTEN

ZWISCHENBERICHT EINER RADIOLOGISCHEN STUDIE ZUR APPENDIZITIS

STUDIENZIELE

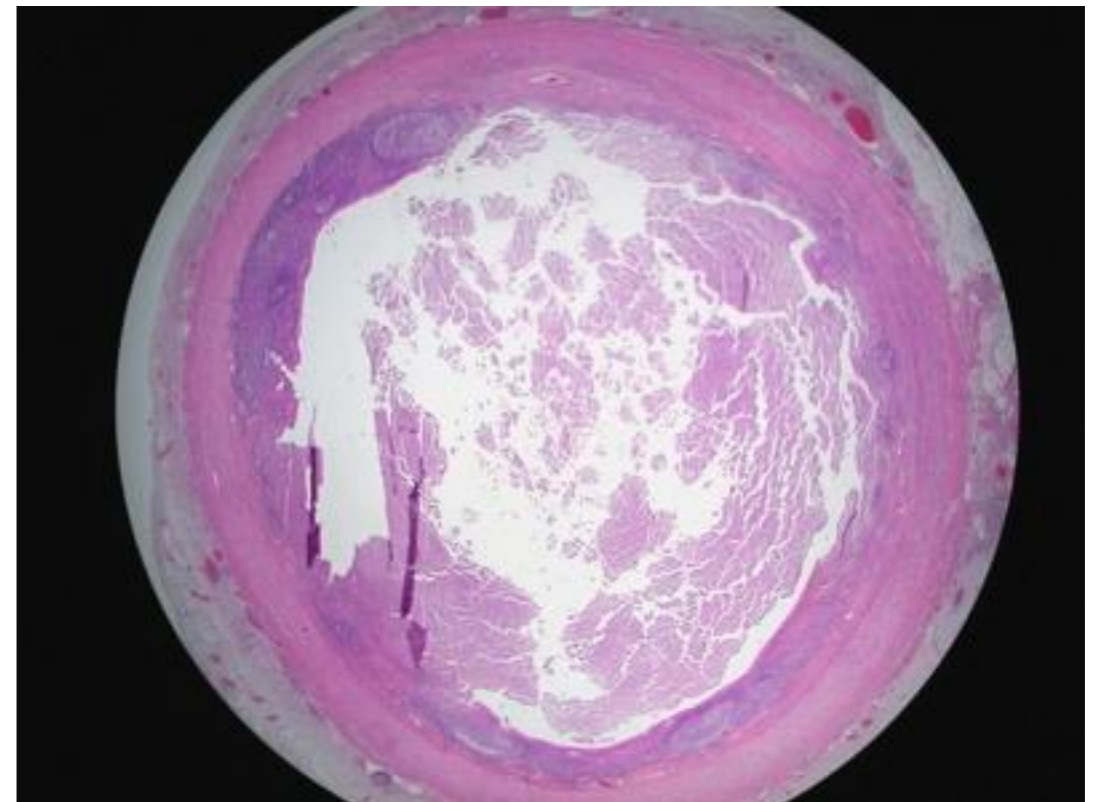
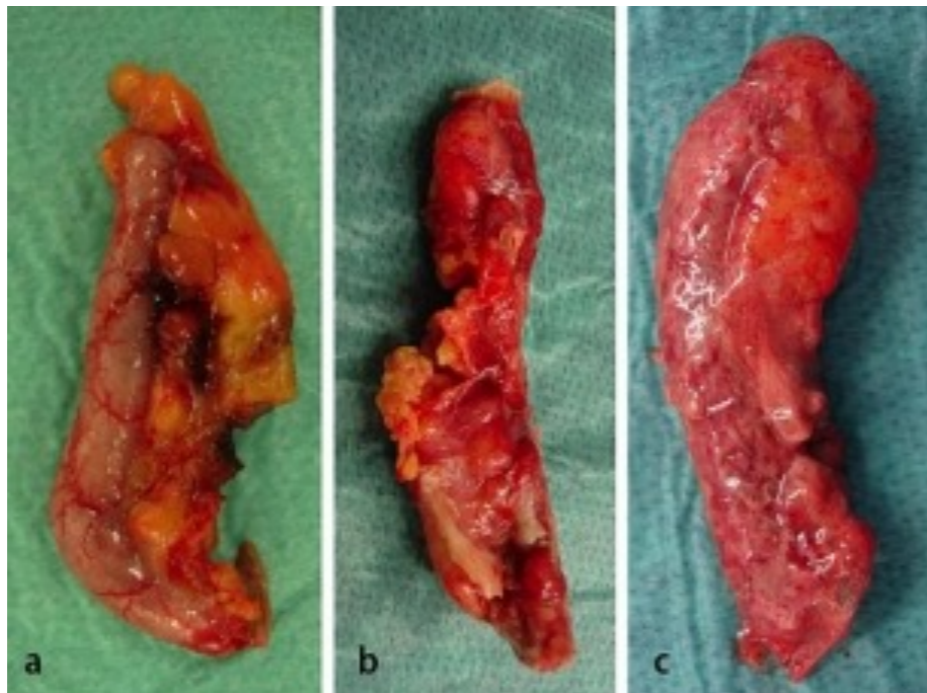
...AUS RADIOLOGISCHER SICHT

- ▶ Bessere Diagnostik
- ▶ Vermeidung von unnötigen Operationen
- ▶ Vermeidung von operativen Komplikationen
- ▶ Verbesserung der diagnostischen Lernkurve
- ▶ Steigerung der konservativen Therapien
- ▶ Verbesserung der „Nomenklatur“



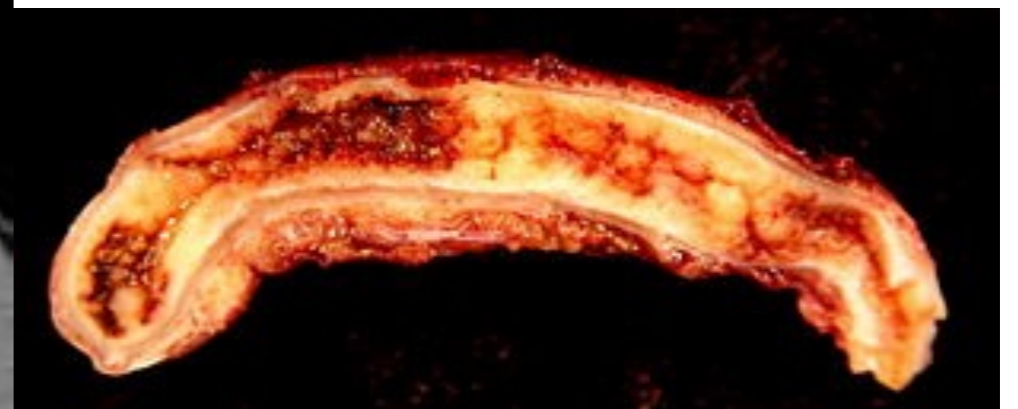
KLASSIFIZIERUNG DER APPENDIZITIS

- ▶ Katarrhalische Appendizitis
- ▶ Ulzero-phlegmonöse Appendizitis
- ▶ Gangränöse Appendizitis
- ▶ Perforierte Appendizitis



KRITIKPUNKTE DER RADIOLOGEN

- ▶ falsche Beschreibung der Präparate
- ▶ voreilige Operationsindikation
- ▶ schlechte histologische Aufarbeitung



ABLAUF DER PRÄPARATSTUDIE

- ▶ präoperatives Sonographie und MRT
- ▶ exakte laparoskopische Bilddokumentation
- ▶ bakteriologische Untersuchung
- ▶ Appendixpräparat ohne Klammernahdtreihe fixieren
- ▶ Klammernahdtreihe in Formalin einlegen
- ▶ postoperatives MRT von der Appendix

Antibiotic Therapy vs Appendectomy for Treatment of Uncomplicated Acute Appendicitis: The APPAC Randomized Clinical Trial.

Salminen P1, Paajanen H2, Rautio T3, Nordström P4, Aarnio M5, Rantanen T6, Tuominen R7, Hurme S8, Virtanen J9, Mecklin JP10, Sand J4, Jartti A11, Rinta-Kiikka I12, Grönroos JM1.

RESULT:

There were 273 patients in the surgical group and 257 in the antibiotic group. Of 273 patients in the surgical group, all but 1 underwent successful appendectomy, resulting in a success rate of 99.6% (95% CI, 98.0% to 100.0%). In the antibiotic group, 70 patients (27.3%; 95% CI, 22.0% to 33.2%) underwent appendectomy within 1 year of initial presentation for appendicitis. Of the 256 patients available for follow-up in the antibiotic group, 186 (72.7%; 95% CI, 66.8% to 78.0%) did not require surgery. The intention-to-treat analysis yielded a difference in treatment efficacy between groups of -27.0% (95% CI, -31.6% to ∞) ($P = .89$). Given the prespecified noninferiority margin of 24%, we were unable to demonstrate noninferiority of antibiotic treatment relative to surgery. Of the 70 patients randomized to antibiotic treatment who subsequently underwent appendectomy, 58 (82.9%; 95% CI, 72.0% to 90.8%) had uncomplicated appendicitis, 7 (10.0%; 95% CI, 4.1% to 19.5%) had complicated acute appendicitis, and 5 (7.1%; 95% CI, 2.4% to 15.9%) did not have appendicitis but received appendectomy for suspected recurrence. There were no intra-abdominal abscesses or other major complications associated with delayed appendectomy in patients randomized to antibiotic treatment.

CONCLUSIONS AND RELEVANCE:

Among patients with CT-proven, uncomplicated appendicitis, antibiotic treatment did not meet the prespecified criterion for noninferiority compared with appendectomy. Most patients randomized to antibiotic treatment for uncomplicated appendicitis did not require appendectomy during the 1-year follow-up period, and those who required appendectomy did not experience significant complications.

Antibiotics as first-line therapy for acute appendicitis: evidence for a change in clinical practice.

Hansson J1, Körner U, Ludwigs K, Johnsson E, Jönsson C, Lundholm K.

BACKGROUND:

Randomized studies have indicated that acute appendicitis may be treated by antibiotics without the need of surgery. However, concerns have been raised about selection bias of patients in such studies. Therefore, the present study was aimed to validate previous findings in randomized studies by a full-scale population-based application.

METHODS:

All patients with acute appendicitis at Sahlgrenska University Hospital (May 2009 and February 2010) were offered intravenous piperacillin plus tazobactam according to our previous experience, followed by 9 days out-hospital oral ciprofloxacin plus metronidazole. Endpoints were treatment efficacy and complications. Efficient antibiotic treatment was defined as recovery without the need of surgery beyond 1 year of follow-up.

RESULTS:

A total of 558 consecutive patients were hospitalized and treated due to acute appendicitis. Seventy-nine percent (n = 442) received antibiotics as first-line therapy and 20 % (n = 111) had primary surgery as the second-line therapy. Seventy-seven percent of patients on primary antibiotics recovered while 23 % (n = 100) had subsequent appendectomy due to failed initial treatment on antibiotics. Thirty-eight patients (11 %) of the 342 had experienced recurrent appendicitis at 1-year follow-up. Primary antibiotic treatment had fewer complications compared to primary surgery.

CONCLUSIONS:

This population-based study confirms previous results of randomized studies. Antibiotic treatment can be offered as the first-line therapy to a majority of unselected patients with acute appendicitis without medical drawbacks other than the unknown risk for long-term relapse, which must be weighed against the unpredicted but well-known risk for serious major complications following surgical intervention.

Long-Term Results Following Antibiotic Treatment of Acute Appendicitis in Adults.

Lundholm K1, Hansson-Assarsson J2, Engström C3, Iresjö BM3.

BACKGROUND:

Antibiotic treatment of acute appendicitis has gained interest and inquiries. Reports have demonstrated both safety and high resolution of symptoms and inflammation following antibiotic treatment of appendicitis, but information on long-term results is required. Our present aim was therefore to evaluate long-term recurrence rate of initial antibiotics-alone treatment for suspected acute appendicitis.

METHODS:

Patients with favourable response to antibiotics in earlier randomized (RCT, n = 97) and population-based (PBT, n = 342) studies as well as subsequently treated non-randomized (Non-R, n = 271) patients are evaluated for long-term risk to relapse demanding surgical appendectomy; altogether 710 patients.

RESULTS:

Clinical characteristics among randomized and non-randomized patients were similar without any statistical difference according to abdominal symptoms and degree of systemic inflammation (CRP, WCC) when antibiotic treatment started. Females and males showed the same results. The median follow-up time was 2162 days (5.92 years), and the range across highest and lowest follow-up was 3495 days (range 2-3497) for the entire group, without significant differences among subgroups (RCT, PBT, Non-R). The cumulative probability for relapse of appendicitis demanding appendectomy was: 0.09, 0.12, 0.12 and 0.13 at 1-, 2-, 3- and 5-year follow-up, with a probability of 0.86 ± 0.013 without appendectomy after 8 years. This may imply an overall benefit of 60-70% by antibiotics during expected 10-year follow-up accounting for initial treatment failures at 10-23% in our published reports.

CONCLUSION:

Antibiotic treatment is safe and effective as a first-line therapy in unselected adults with acute appendicitis with a risk around 15% for long-term relapse following favourable initial treatment response.

Antibiotics-first strategy for uncomplicated acute appendicitis in adults is associated with increased rates of peritonitis at surgery. A systematic review with meta-analysis of randomized controlled trials comparing appendectomy and non-operative management with antibiotics.

Podda M1, Cillara N2, Di Saverio S3, Lai A4, Feroci F5, Luridiana G6, Agresta F7, Vettoretto N8;

BACKGROUND:

Acute appendicitis is the most common surgical diagnosis in young patients, with lifetime prevalence of about 7%. Debate remains on whether uncomplicated AA should be operated or not. Aim of this meta-analysis of randomized controlled trials was to assess current evidence on antibiotic treatment for uncomplicated AA compared to standard surgical treatment.

RESULTS:

Five RCTs comparing AT and ST qualified for inclusion in meta-analysis, with 1.351 patients included: 632 in AT group and 719 in ST group. Higher rate of treatment efficacy based on 1 year follow-up was found in ST group (98.3% vs 75.9%, $P < 0.0001$), recurrence at 1 year was reported in 22.5% of patients treated with antibiotics. Rate of complicated appendicitis with peritonitis identified at time of surgical operation was higher in AT group (19.9% vs 8.5%, $P = 0.02$). No statistically significant differences were found when comparing AT and ST groups for the outcomes of overall post-intervention complications (4.3% vs 10.9%, $P = 0.32$), post-intervention complications based on the number of patients who underwent appendectomy (15.8% vs 10.9%, $P = 0.35$), length of hospital stay (3.24 ± 0.40 vs 2.88 ± 0.39 , $P = 0.13$) and period of sick leave (8.91 ± 1.28 vs 10.27 ± 0.24 , $P = 0.06$).

CONCLUSIONS:

With significantly higher efficacy and low complication rates, appendectomy remains the most effective treatment for patients with uncomplicated AA. The subgroups of patients with uncomplicated AA where antibiotics can be more effective, should be accurately identified.

**CHIRURGEN SIND DIE EINZIGEN
MENSCHEN, DIE OHNE BLINDDARM
UND MANDELN NICHT LEBEN KÖNNEN.**

Peter Sellers

KRITIKPUNKTE DER CHIRURGEN

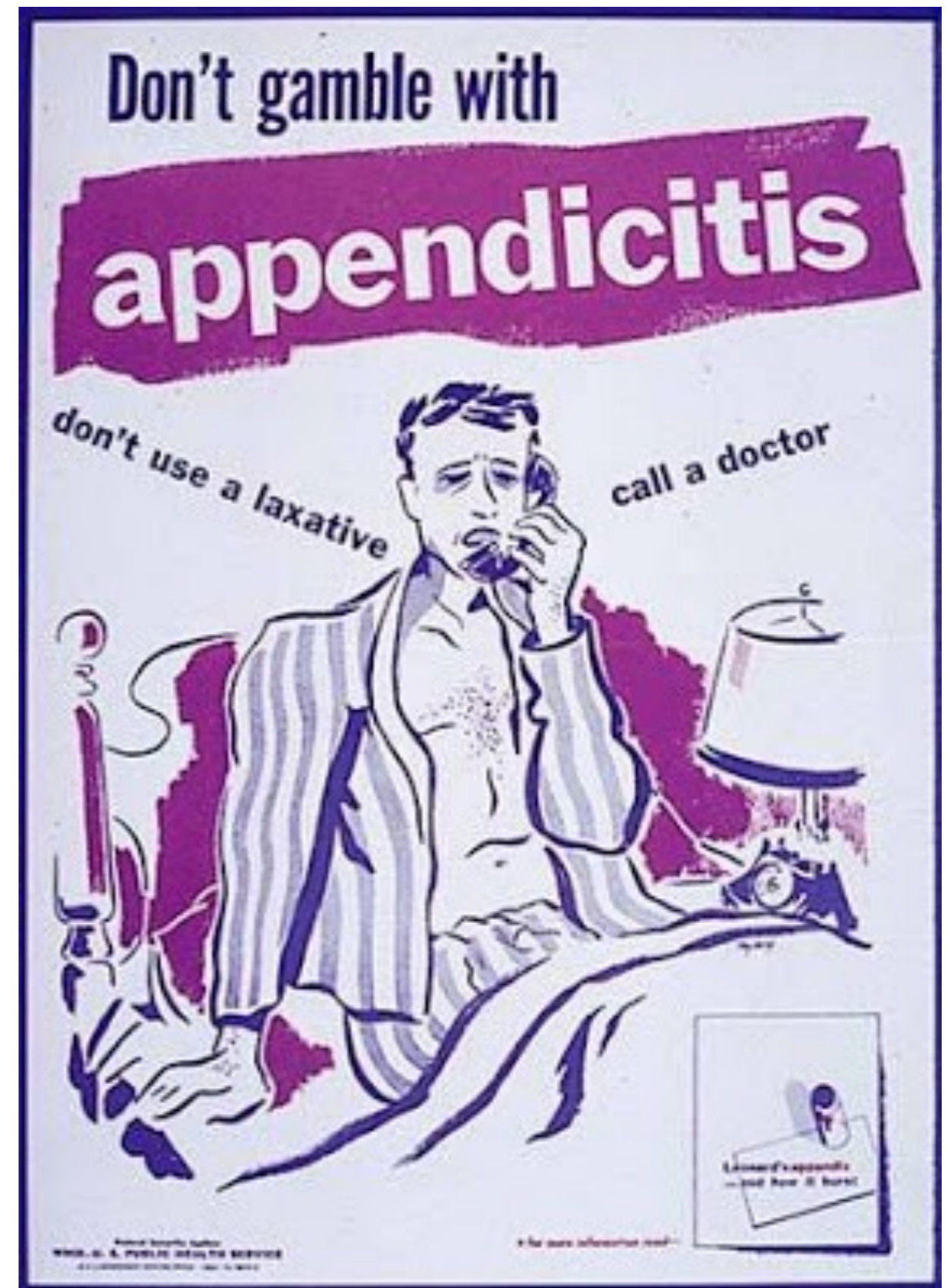


KRITIKPUNKTE DER CHIRURGEN



KRITIKPUNKTE DER CHIRURGEN

- ▶ Zeitverlust
- ▶ Übertherapie (diagnostisch)
- ▶ Differentialdiagnosen (!!!)
- ▶ Kostensteigerung
- ▶ Verschwendung von Ressourcen
- ▶ utopische Studienziele
- ▶ „Schuster bleib bei deinen Leisten“
- ▶ Patientengefährdung





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DANKE FÜR IHRE AUFMERKSAMKEIT