



Correction to: Appendicolith appendicitis is clinically complicated acute appendicitis—is it histopathologically different from uncomplicated acute appendicitis

Jari Mällinen^{1,2} · Siina Vaarala^{3,4} · Markus Mäkinen^{3,4} · Elina Lietzén^{5,6} · Juha Grönroos^{5,6} · Pasi Ohtonen² · Tero Rautio^{1,2} · Paulina Salminen^{5,6,7}

Published online: 3 March 2020
© Springer-Verlag GmbH Germany, part of Springer Nature 2020

Correction to: International Journal of Colorectal Disease
(2019) 34:1393–1400
<https://doi.org/10.1007/s00384-019-03332-z>

The authors regrets that a typo error found on their published paper. The corrections are as follows:

As mentioned in Materials and Methods (p. 1395), the inflammatory cell count was performed on predefined 0.100 mm² areas. In Tables 2 and 3 of the published article, the predefined areas are falsely claimed to be 1mm². The Tables 2 and 3 shows the corrected numbers.

Same corrections concerning these areas should also be made in the Abstract (p. 1393). The Results section of the Abstract should be as follows (corrections in bold): Using multivariate logistic regression models adjusted for age, gender, and symptom duration, statistically significant differences were detected in the depth of inflammation ≤ 2.8 mm (adjusted OR 2.18 (95% CI: 1.29–3.71, $p=0.004$), microabscesses (adjusted OR 2.16 (95% CI:

1.22–3.83, $p=0.008$), the number of eosinophils and neutrophils $\geq 150/0.1$ mm² (adjusted OR 0.97 (95% CI: 0.95–0.99, $p=0.013$), adjusted OR 3.04 (95% CI: 1.82–5.09, $p<0.001$, respectively).

Same corrections concerning these areas should also be made in the Results section of the article (p. 1396) (corrections in bold): The neutrophilic granulocyte infiltration was more frequently dense in appendicolith appendicitis (42.7% vs 19.6% $\geq 150/0.1$ mm², $p<0.001$), whereas the number of eosinophils was higher in uncomplicated acute appendicitis (11.0/ 0.1 mm² vs 6.9/ 0.1 mm², $p=0.001$). The value of 150 neutrophils/ 0.1 mm² gave 80% specificity and therefore was used as a cut-off point.

The original article remain unchanged.

The online version of the original article can be found at <https://doi.org/10.1007/s00384-019-03332-z>

✉ Jari Mällinen
jari.mallinen@gmail.com

¹ Department of Surgery, Oulu University Hospital, Oulu, Finland

² Division of Operative Care, Oulu University Hospital and Medical Research Center Oulu, University of Oulu, Oulu, Finland

³ Cancer and Translational Medicine Research Unit, University of Oulu and Department of Pathology, Oulu University Hospital, Oulu, Finland

⁴ Medical Research Center Oulu, Oulu, Finland

⁵ Division of Digestive Surgery and Urology, Turku University Hospital, Turku, Finland

⁶ Department of Surgery, University of Turku, Turku, Finland

⁷ Satakunta Central Hospital, Pori, Finland

Table 2 The histopathologic parameters measured

	Uncomplicated acute appendicitis, n=187	Appendicolith appendicitis, n=157	p value
Max diameter of appendix, mm, mean (SD), n/N (%)	7.954 (1682)	9.181 (2107)	<0.001
Depth of inflammation, mm, mean (SD), n/N (%)	3.641 (1038)	3.325 (1001)	.007
≤2.8 mm, n/N (%)	165/187 (88.2)	145/157 (92.4)	.003
Superficial mucosal damage, n/N (%)	44/187 (23.5)	75/157 (47.7)	<0.001
Deep mucosal damage, n/N (%)	27/187 (14.4)	77/157 (49.0)	<0.001
Neutrophils, n/0.1 mm ²			<0.001
<150, n/N (%)	144/179 (80.4)	82/143 (57.3)	
≥150, n/N (%)	35/179 (19.6)	61/143 (42.7)	
Eosinophils, n/0.1 mm ² , mean (SD)	11.0 (14.5)	6.9 (9.8)	.001
Micro-abscesses			.016
No abscesses	162/187 (86.6)	119/156 (76.3)	
One or multiple abscesses	25/187(13.4)	37/156 (23.7)	
Presence of fecal material			<.001
No fecal material n/N (%)	155/187(82.9)	63/156 (40.4)	
Appendicolith n/N (%)	9/187(4.8)	26/156 (16.7)	
Fecal material	23/187(12.3)	67/156 (42.9)	

Table 3 The results of logistic regression analysis for the presence of acute appendicitis with appendicolith. The results are presented as odds ratio (OR) with 95% confidence interval (95% CI)

Variable	Univariate OR	Adjusted ¹ OR	95% CI	p value
Microabscess	2.02	2.16	1.22 to 3.83	0.008
Eosinophils, n/0.1 mm ²	0.97	0.97	0.95 to 0.99	0.013
Neutrophils, ≥150/0.1 mm ²	3.06	3.04	1.82 to 5.09	<0.001
Faecal material	5.37	6.05	3.45 to 10.59	<0.001
Depth of inflammation, ≤2800µm	2.17	2.18	1.29 to 3.71	0.004

¹ Adjusting variables age, sex and duration of symptoms.