Does post-operative bloodwork in elective ileostomies decrease the incidence of gastrointestinal dysfunction?

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Key message: In patients undergoing elective laparoscopic ileostomy creation, bloodwork in the first 3 days after surgery is most often normal and has low clinical relevance in regards to GI dysfunction. Therefore, postoperative bloodwork should only be performed when clinically indicated.

Background:

- Routine bloodwork is often performed post-operatively for new ileostomates but its value is questionable.
- Enhanced recovery pathways (ERP) do not recommend routine post-operative bloodwork
- New ileostomates often have electrolyte disturbances, which may delay recovery of gastrointestinal function.

Objectives:

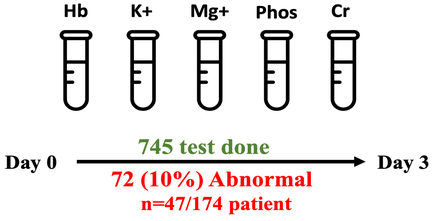
- To determine the utility of post-operative bloodwork in patients undergoing ileostomy creation.
- Primary outcome: GI dysfunction (GID), define as failure to tolerate oral intake/or failure of passage of GI content by POD4.
- Secondary outcome: abnormal result rate and recovery course.

Method:

- Retrospective study in high-volume academic center.
- Adults undergoing elective laparoscopic ileostomy creation +/- concomitant procedures (2017-2022).
- ERP did not include routine bloodwork but were ordered at treating team's discretion.
- Hemoglobin and electrolytes to POD3 were reviewed.

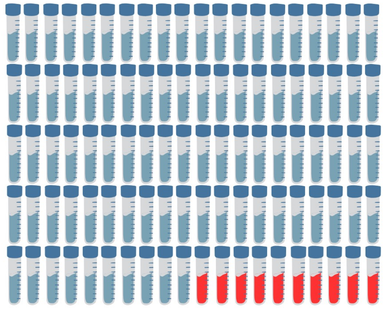
Result:

- 174 patients were included, 100 (57%) patient had bloodwork vs 74 (43%) patient did not.
- Hypomagnesemia was the most common bloodwork abnormality in 20 (3%) test.
- Abnormal bloodwork was not associated with increased GID (GID 37% vs. no GID 26%, p=0.3).

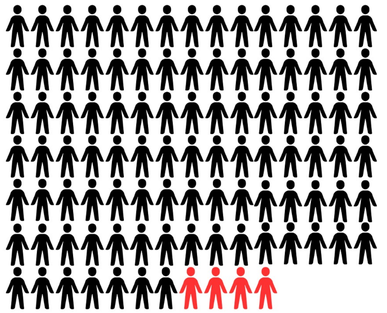


Variable	No bloodwork n= 74	Bloodwork n=100	*P*-value
Age, mean ±SD	58.3 ± 14.6	58.3 ± 14.6	0.9
Male, n (%)	47 (63.5)	69 (69)	0.4
BMI, mean ± SD	26.4 ± 5.1	26.2 ± 5.5	0.8
ASA 2, n (%)	43 (58)	57 (57)	0.8
ASA 3, n (%)	27 (36.4)	39 (39)	0.8
Rectal cancer, n (%)	62 (83.7)	77 (77)	0.2
Low anterior resection, n (%)	74 (63.5)	62 (62)	0.8
Post-op complications, n (%)	12 (16.2)	37 (37)	0.003
Operation time (min), mean ± SD	238 ±94	288 ±94	0.001
LOS (days), mean ±SD	4.9 ±6.1	7.7 ±7.2	0.009
ER visit within 30 days, n (%)	17 (22.9)	28 (28)	0.4
GI dysfunction, n (%)	4 (5.4)	15 (15)	0.04

Numbers in perspective:



Of 100 blood test
10 had abnormal result



Of 100 patient receving bloodwork
Only 4 had abnormal result + GID