Supplementary information

Postoperative acute kidney injury in adult non-cardiac surgery: joint consensus report of the Acute Disease Quality Initiative and PeriOperative Quality Initiative

In the format provided by the authors and unedited

Supplementary information

ADQI-24 and POQI-7 Faculty

Organizers/Chairs

John Prowle, QMUL, UK (Local Organiser) John A. Kellum Pittsburgh, USA Andy Shaw, University of Alberta, Canada Lui Forni, Surrey University, UK Claudio Ronco, University of Padua, Italy

Group 1 (Epidemiology and Pathophysiology)

Morgan Grams (Chair), Johns Hopkins University, USA Mike Grocott (Co-Chair), Southampton University, UK Raquel Bartz, Duke University, USA Azra Bihorac, University of Florida, USA* Lui Forni, Surrey University, UK

Group 2 (Definitions)

David McIlroy (Chair), Vanderbilt University, USA Mitra Nadim (Co-Chair), USC, USA Pat Murray, University College Dublin, Ireland Ravi Mehta, USCD, USA Andy Shaw, University of Alberta, Canada

Group 3 (Prevention)

Mark Edwards (Chair), Southampton, UK Kathleen Liu (Co-Chair), UCSF, USA Tim Miller, Duke University, USA Samira Bell, Dundee University, Scotland Sean Bagshaw, University of Alberta, Canada Michael Joannidis Univ Innsbruuck

Group 4 (Treatment)

Alex Zarbock (Chair), University of Munster, Germany Michelle Chew (Co-Chair), Linkoping, Sweden Denny Levett, Southampton University, UK Monty Mythen, University College London, UK Thomas Rimmele, Lyon, France Chuck Hobson, University of Florida, USA*

Group 5 (Outcomes)

Marlies Ostermann (Chair), King's College UK Max Bell (Co-Chair), Karolinska University, Sweden Rupert Pearse, QMUL, UK TJ Gan, Stony Brook University, USA Jay Koyner, University of Chicago, USA John Prowle, QMUL, UK

*Participated in pre-and post-conference activities only

Supplementary table 1. Incidence and risk factors for AKI after non-cardiac and non-vascular surgery

Study	Type of surgery	Study design	No. of	AKI	AKI	Risk factors for AKI
long	Open and	Detrespective	Patients	definition	incidence	Female conder, hupertansian, CKD, ASA IV
(2016) ²⁹	laparoscopic	cohort	3,902	KDIGO	0.8%	or V reoperation
(2020)	abdominal surgery	conore				
O'Connor	Major abdominal	Systematic	Pooled	RIFLE, AKIN,	13.4%	NA
(2016)4	surgery	review	82,514	KDIGO		
Grams	Major surgery	Retrospective	161,185	KDIGO	11.8%	Older age, African American race,
(2016) ³¹		cohort				hypertension, diabetes, lower eGFR
Ishikawa	Lung resection	Retrospective	1,129	AKIN	5.9%	Hypertension, peripheral vascular disease,
(2012)		conort				procedure, prior use of ABB
Kim	Gastric cancer	Retrospective	4.718	KDIGO	14.4%	Male gender, hypertension, COPD.
(2013) ¹²⁸	surgery	cohort	, -			hypoalbuminia, diuretics, vasopressors,
						contrast agents, PRBCs
Bravi	Partial	Retrospective	1,893	RIFLE	20.4%	Male gender, older age, lower eGFR,
(2019)116	nephrectomy	cohort				diabetes, hypertension, open surgery
Bang (2018)129	Colorectal Surgery	Retrospective	4,320	AKIN, RIFLE	9.6%,	NA
(2018) Biborac	Major surgery	Retrospective	27.8/1	RIFLE	3.8%	ΝΑ
$(2013)^{25}$	Wajor Surgery	cohort	27,041		5770	NA
Hobson	Inpatient surgery	Retrospective	50,314	RIFLE	39%	Older, male gender, African American
(2015) ¹³⁰		cohort				
Walker	Orthopedic	Retrospective	11,004	KDIGO	11.2%,	NA
(2016) ¹³¹	surgeries, neck of	cohort			13.8%	
Vaught	Major inpatient	Retrospective	2 3/1	RIFLE	13%	Older age malignant tumor metastatic
(2015) ¹³²	gynaecologic	cohort	2,341		1370	cancer, emergent surgery, weekend
(/	surgery					admission, congestive heart failure,
						chronic pulmonary disease
Ozrazgat-	Major inpatient	Retrospective	51,457	KDIGO	39%	NA
Baslanti	surgery	cohort				
(2017) ²¹³ Abdullah	Lanarosconic	Retrospective	1 230	KDIGO	2 9%	Lower eGER angiotensin-converting
$(2015)^{23}$	bariatric surgery	cohort	1,230	KBIGG	2.370	enzyme inhibitors and
()						angiotensin II receptor blockers, higher
						body mass index
Bonavia	Colorectal surgery	Retrospective	1,020	KDIGO (sCr	6.5%,	NA
(2019) ²⁶		cohort		only, sCr or	57.4%	
				urine		
Kim	Total knee	Retrospective	1.309	KDIGO	4.4%	Age, diabetes, uric acid, beta blocker use
(2016) ¹³³	arthroplasty	cohort	1,505	NDIGO	4.470	diuretics
Rajan	Partial	Retrospective	1,955	AKIN	39.3%	Hypertension, open and laparoscopic
(2015) ³⁰	nephrectomy	cohort				nephrectomy (vs robotic nephrectomy),
						duration of surgery, longer ischaemia
						ume, and warm ischaemia (vs. cold ischaemia)

*Search strategy: studies with at least 1,000 patients, unselected for post-surgical outcomes (i.e., excluded studies of patients admitted to the ICU after surgery, or surviving until discharge).