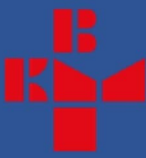


EXPRESSION OF MMP-3 AND KIM-1 IN THE CELLS OF KIDNEYS AFFECTED BY ACUTE TUBULAR NECROSIS OR ACUTE CELLULAR REJECTION POST-TRANSPLANT



Vuković J¹, Delalić Đ², Prkačin I^{1,3}



1 – Clinical Hospital Merkur, Zagreb, Croatia

2 – Health Center Zagreb Center, Zagreb, Croatia

3– University of Zagreb, School of Medicine, Zagreb, Croatia

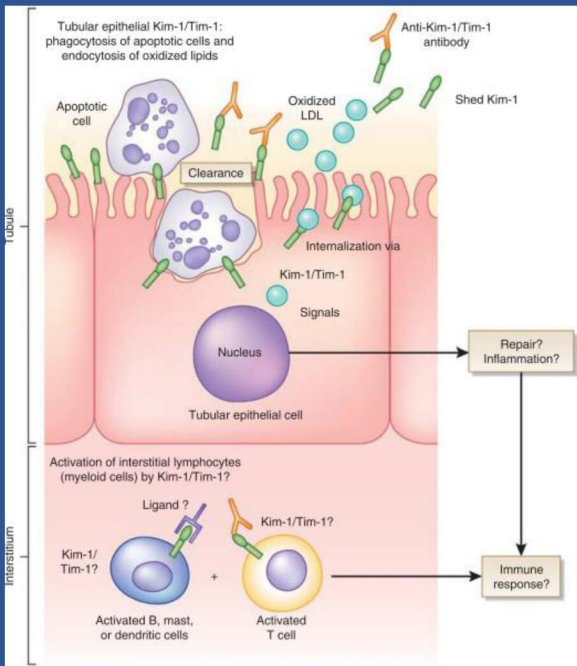


Figure 1. Expression and possible role of kidney injury molecule-1 (KIM-1) in acute renal injury
Adapted from: *Kidney Int.* 2012 May;81(9):809-11

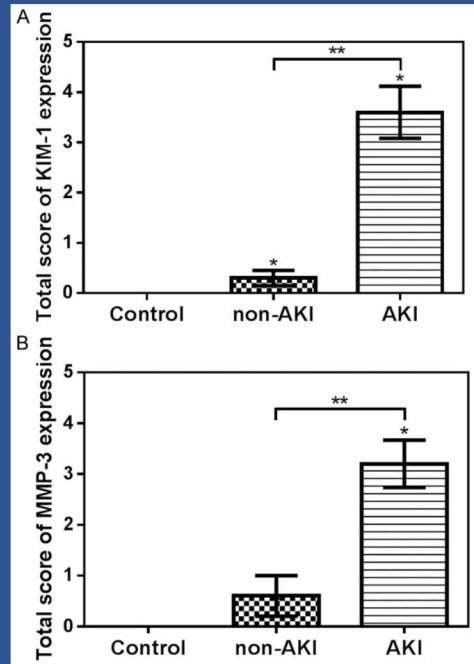


Figure 2. Expression of KIM-1 and matrix metalloproteinase-3 (MMP-3) in post-mortem renal tissue of patients who died due to malaria; AKI – Acute Kidney Injury
Adapted from: *Int J Clin Exp Pathol.* 2017 Jul 1;10(7):7856-7864



Is there a correlation between the expression of KIM-1 and/or MMP-3 and post-transplantation kidney injury at 0,6 and 12 months following the transplantation procedure?



Immunohistochemical and pathohistological analysis



Renal tissue obtained by tissue biopsy from patients pre-transplantation and 6, 12 months post-transplantation



Renal outcomes:

1. acute cellular rejection (ACR)
2. acute tubular necrosis (ATN)



Serum creatinine measured pre-transplantation, as well as immediately post-transplantation, 7 days, 6 months and 1 year post-transplantation

		ACR with Delayed Graft Function (DGF)				p
		ACR with delayed graft function (DGF)	ACR without DGF	ATN with DGF	ATN without DGF	
		%	%	%	%	
MMP-3 grade(+) bx 6. mths.	No expression	0,0%	0,0%	0,0%	9,1%	0,0049
	<10%	20,0%	90,0%	55,6%	27,3%	
	11-25%	80,0%	10,0%	22,2%	54,5%	
	26-45%	0,0%	0,0%	22,2%	9,1%	
	46-75%	0,0%	0,0%	0,0%	0,0%	
	>75%	0,0%	0,0%	0,0%	0,0%	

Table 1. Differences in MMP-3 expression between groups