



Prognosis and operative outcomes for patients undergoing radical nephrectomy and inferior vena cava thrombectomy.

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Objective:

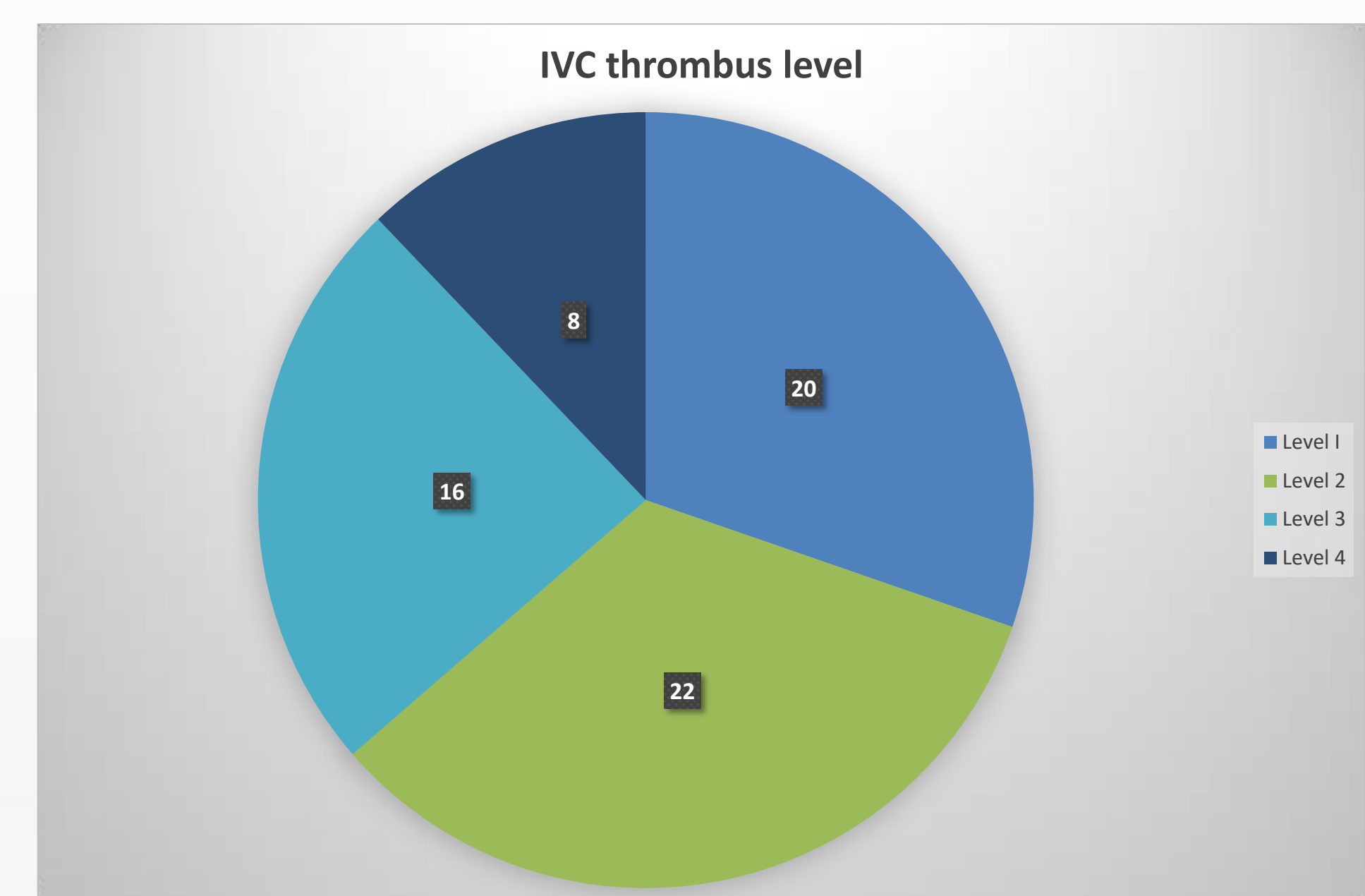
To review the outcome of patients undergoing resection for renal cell carcinoma (RCC) with inferior vena cava (IVC) thrombus.

Patients & methods:

- A retrospective analysis of patients who underwent resection for RCC with IVC thrombus in our centre from 2000 to 2022 was performed.
- Patients with non-RCC pathology were excluded.
- The survival data and operative outcomes were evaluated.

Results:

- A total of 66 patients were included, with a median follow up of 24 months. There were 48 men and 18 women with a median age of 63 at the time of diagnosis.
- In non-metastatic patients, the 5-year overall survival was 61.5% and the 5-year metastasis-free survival was 33.3%. Multivariate analysis showed that a higher ASA grade was associated with a worse overall survival (P= 0.038).



	Univariate model		Multivariate model	
	HR (95% CI)	P	HR (95%CI)	P
Age at diagnosis	1.03 (0.98, 1.08)	0.213		
Gender	0.88 (0.32, 2.39)	0.798		
ASA grade	3.89 (1.13, 13.3)	0.031	3.85 (1.08, 13.7)	0.038
Fuhrman grade	1.91 (1.01, 3.62)	0.046		
T stage	0.82 (0.30, 2.24)	0.694		
N stage	1.13 (0.70, 1.83)	0.621		
Thrombus level	0.80 (0.47, 1.37)	0.419		

	IVC level III/V	IVC level I/II	95% CI	P value
Blood loss	4970ml	1980ml	1195-4777	0.002
Transfusion volume	2260ml	744ml	676-2300	0.001
Longer operative time	404mins	296mins	14.5-201	0.025
Length of stay	14.6days	11.6days	-0.578-6.57	0.099
Clavien-dindo Grade ≥ III complications	14%	5%		0.260

Comparison of operative outcomes in high level (III/IV) vs low level (I/II) IVC thrombus

Cox univariate and multivariate analysis of prognostic factors associated with overall survival

Conclusion:

Operations for renal cell carcinoma with higher IVC thrombus level were associated with higher blood loss and longer operative time. The overall survival was mainly affected by patient's ASA grade but not tumour characteristics.

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