

To anticoagulate or not anticoagulate portal vein tumor thrombus in hepatocellular carcinoma? That is the question



C. Clifford¹, R. Varman¹, W. Shanahan¹, N. Mehigan¹, B. Shoukat¹, M. Bourke¹, D. Houlihan¹, K. Elguzouli¹

¹The Liver Unit, St Vincent's University Hospital, Dublin

Introduction

- Portal vein thrombosis (PVT) occurs in up to 40% of patients with hepatocellular carcinoma (HCC) and can be bland or malignant
- The diagnosis of portal vein tumor thrombus (PVTT) has important implications on treatment options and prognosis
- There is no consensus whether anti-coagulation improves outcomes and use varies between individual physicians.
- Anticoagulation is considered on a case-by-case basis and evidence is lacking to support a survival benefit.

Aim

- We aimed to determine whether anti-coagulation impacts on the survival of patients with HCC and confirmed portal vein tumor thrombus (PVTT).

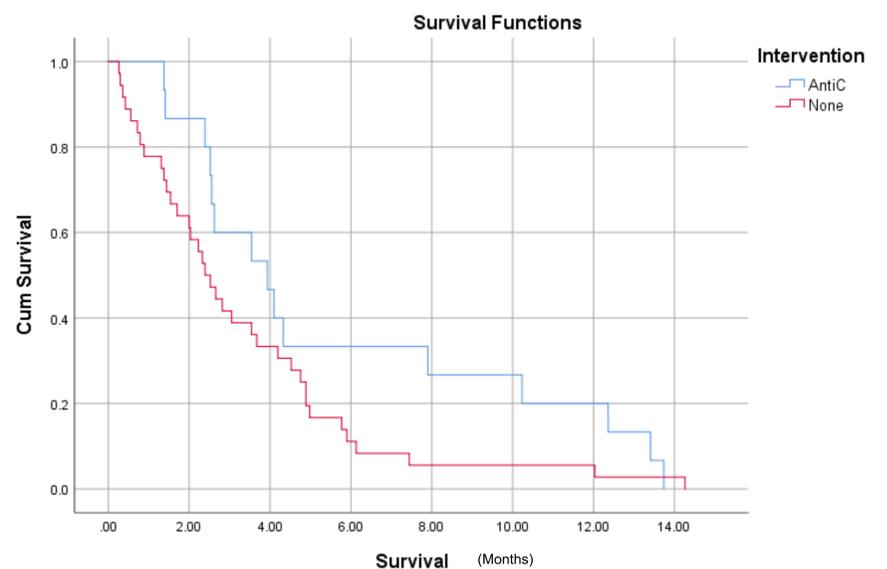
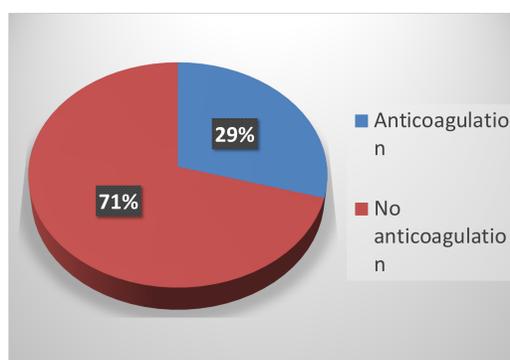
Method

- A retrospective study was carried out at the National Liver Transplant Centre including all patients who died with underlying HCC and PVTT.
- Data was collected from the electronic HCC data-base.
- Date of PVTT diagnosis was taken as the date first diagnosed on imaging.

- Baseline demographics, treatments (anticoagulation or no anticoagulation) and survival times in months for each treatment group were recorded

Results

- 51 patients who died with an underlying diagnosis of HCC and PVTT were included.
- 84.3% (n=43) were male, average age was 64 .
- 88.3% (n=45) had underlying cirrhosis
- 87% were Barcelona clinic liver cancer staging (BCLC) C or D.
- 29.4% (n=15) were anti-coagulated and the median survival was 5.8 months
- 70.6% (n=36) were not anti-coagulated and the median survival was 3 months.
- P value was 0.11



Discussion

- Portal vein tumor thrombus in the setting of HCC is associated with poor survival outcomes.
- Treatment options are limited to systemic chemotherapy with sorafenib which in the main confers modest survival benefit.
- Data on the role of anticoagulation in PVTT is very limited unlike data for anticoagulation in non malignant PVT.
- The boundaries are being pushed surgically as we can see with the HCC East- West study group, but this approach still remains controversial and is reserved for select cases.
- Whether anticoagulation confers an additional survival benefit to sorafenib is unclear but a more liberal approach should be considered if we are to realise its true potential benefit.

Conclusion

- No significance is observed in overall survival between those receiving anticoagulation or not.
- The trend on Kaplan- Meier analysis is encouraging and potentially with greater numbers and closer inspection of the factors determining whether or not patients were anticoagulated we may find there is a survival benefit to anticoagulating select patients with PVTT.