

Characteristics and factors in the mortality of Hepatocellular carcinoma patients with and without HIV infection.

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Background

- Hepatocellular carcinoma (HCC) is a major public health problem in West African countries.
- HCC still has a strikingly high mortality in this region.
- Risk factors including chronic HBV, HCV infection, Aflatoxin exposure, and alcohol consumption play a major role in the epidemiology of HCC in Nigeria.
- Whether HIV also contributes to an increased risk of HCC is in this region is unclear.

Objectives

- To describe the clinical, radiological and laboratory features in HCC in Nigerians with and without HIV infection.
- To compare median survival in HCC patients with HIV and those without HIV.

Methods

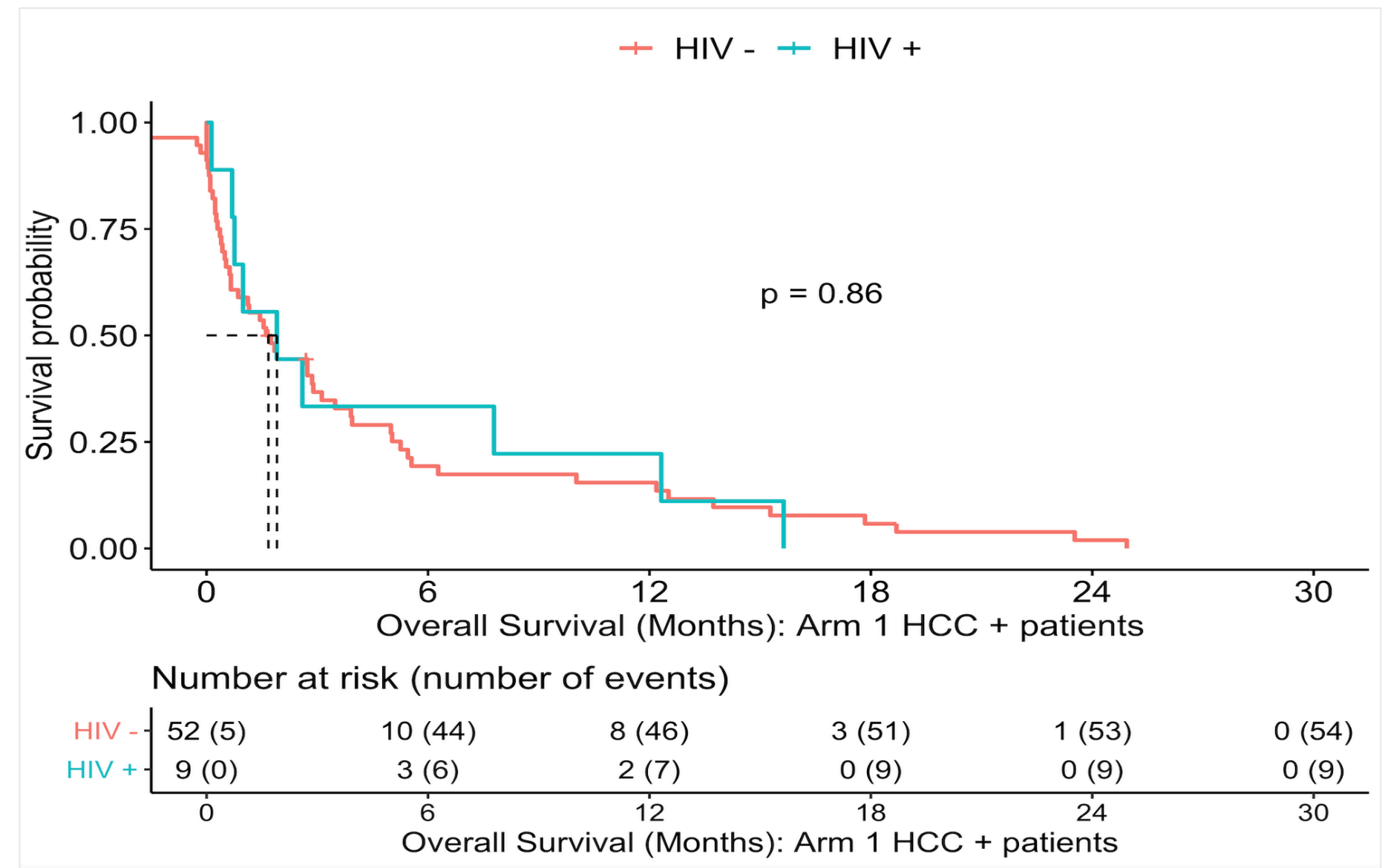
- Participants >18 years with HCC recruited from a NIH-funded prospective, non-interventional study assessing biomarkers associated with HIV-related HCC at Jos University Teaching Hospital and Lagos University Teaching Hospitals were included.
- Participants were diagnosed with HCC by Computed Tomography and according to AASLD criteria
- All participants received testing for HIV at enrollment as well as baseline HIV labs, screening for viral hepatitis co-infection and other co-morbidities
- Clinical, radiologic and laboratory characteristics were compared between HIV-infected and uninfected participants using Fishers exact (categorical) and Mann-Whitney U tests (Continuous)
- Overall survival (OS) was defined as time from study enrollment to death or will be censored at the date of last available follow-up information. Participants were followed up to a maximum of 1 year

Results

Table 1.Showing demographic, clinical and radiologic characteristics

Parameter	Overall(%)	HIV-(%)	HIV+(%)	P VALUE
Total Participants	145	122	23	
Median Age	50	50	52	0.88
Males (n, %)	103 (71.5)	89 (73.6)	19 (82.6)	0.22
BMI	22.3 (15, 33)	22.2 (15, 32)	22.4 (15,32)	0.32
Occupation, unemployed (n,%)	8 (5.5)	6 (4.9)	2 (8.7)	0.61
Current alcohol use (n, %)	37 (25.5)	30 (24.6)	7 (30.4)	0.60
ART treatment duration, median yrs (range)	7 (1,18)	-	7 (1,18)	-
Pre-ART CD4 count, median (range)	236.5 (61,479)	-	236.5 (61,479)	-
Anti-HCV positive (n, %)	50 (36.2%)	45 (38.5)	5 (23.8)	0.23
HCV RNA positive (>10 IU/mL)*	33 (68.8)	28 (65.1)	5 (100)	0.17
HBsAg positive (n, %)	77 (55.8)	65 (55.6)	12 (57.1)	1.0
ALT median, (range)	47 (3.2, 392)	46 (3.2, 392)	51.5(12-346)	0.43
AFP median, (range)	1000 (0.5-1210)	1000 (0.5-1210)	423 (2.90, 1000)	0.16
Number of lesions, median (range)	6 (1,11)	6 (1,11)	5 (1,11)	0.61
Liver mass diameter, median (range)	7.55 (1,80)	7.80 (1,22)	6.6 (1.80, 80)	0.58

Figure 1. Overall survival by HIV status



Conclusion

- A very high mortality and short median survival was observed in both HIV-infected and uninfected subjects. There was no difference in survival between the two groups.
- Active HCV infection was present in over two-thirds of subjects suggesting it is an important risk factor for HCC in this setting.
- A focus on early diagnosis and screening for risk factors including viral hepatitis B and C may serve as an important intervention to prevent HCC occurrence.

Acknowledgements

1. U54 project 1 team JUTH/LUTH, 2. North Western University, 3.NCI, 4.NIH

