

CHANGES IN ULTRASOUND FINDINGS DURING TREATMENT FOR HIV-TB CO-INFECTION

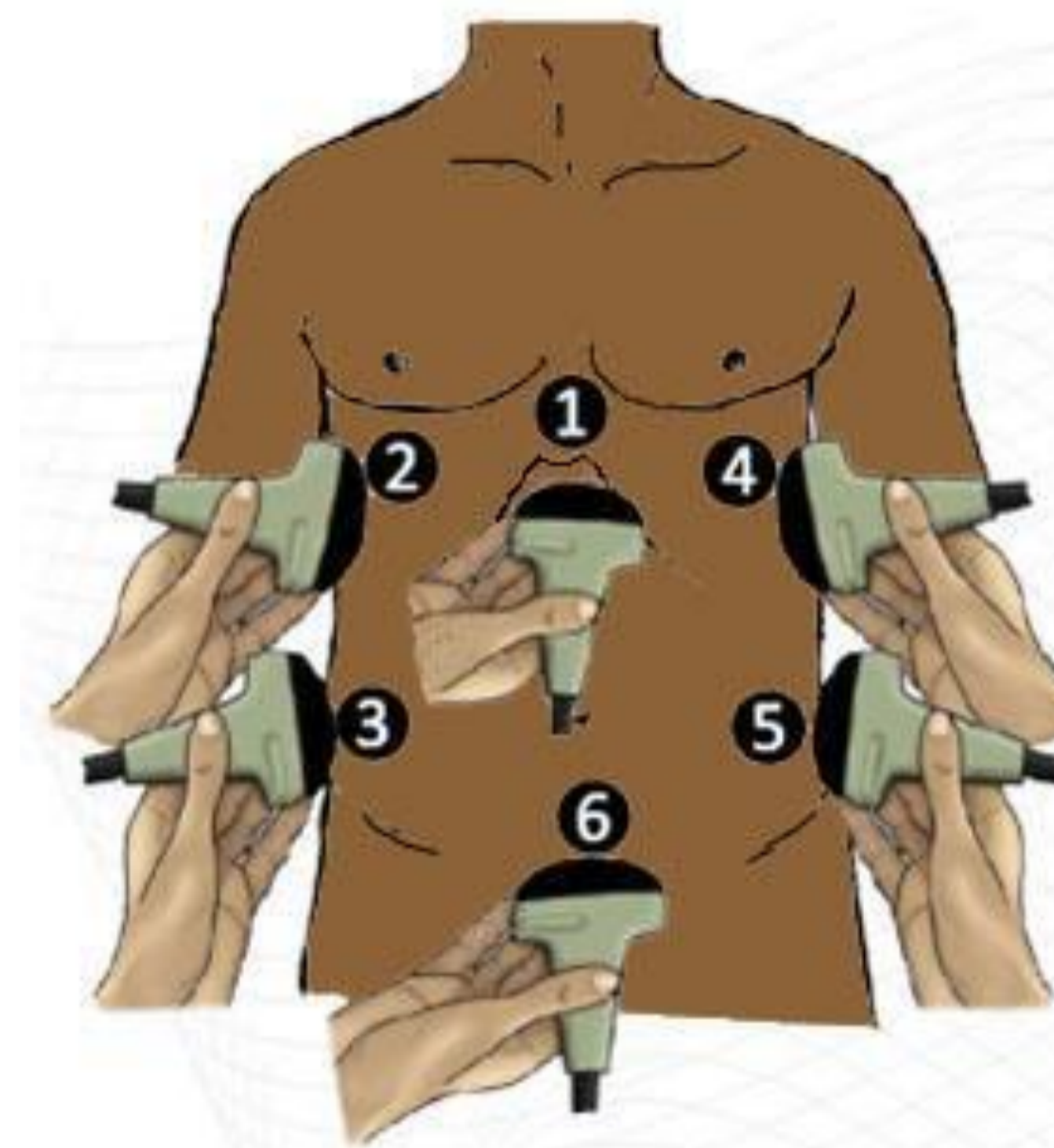
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OBJECTIVES

- Extrapulmonary and disseminated TB in HIV patients primarily affect individuals in Sub-Saharan Africa, but are also seen in immigrants living in Europe. Ultrasound (US) can detect enlarged abdominal lymph nodes, pleural and peritoneal effusions and focal lesions in the liver and spleen.
- Changes in ultrasound findings during treatment of TB and HIV infection have never been studied. Here we investigate changes in US findings in EPTB-HIV co-infected patients during follow-up and their association with clinical findings.

- ✓ In 10 patients (43,47 %) FASH findings disappeared after 1 month of treatment. In 3 patients (13.04%) findings were less prominent at 1 month and disappeared after 3 months of treatment
- ✓ Patients in whom this regression did not occur, were unresponsive to treatment because of MDR-TB, IRIS (3 cases, 13,04%), or had delayed treatment and severe immunosuppression.
- ✓ US signs were more remarkable and clinical outcome more severe in Sub-Saharan immigrants.



The FASH scan (2)

METHODS

- 22 patients with culture-confirmed HIV-EPTB co-infection diagnosed and treated in our Hospital, from 2005-2013
- Mean age 34.47, range 24-57, M/F 1.09, 15 of them (65.21 %) African immigrants, mean CD4 119 (range 5-576)
- FASH (focused assessment with sonography for HIV) follow-up at 1, 3, 6 and 12 months after diagnosis

	N present at time of diagnosis	Disappeared between			Persisted > 12 month (%)
		0 and 1 month (%)	1 and 3 month (%)	3 and 12 month (%)	
Abdo. lymph nodes	18	10 (55%)	3 (17%)	1 (6%)	4 (22%)
Spleen abscess	9	6 (67%)	1 (11%)	-	2 (22%)
Liver abscess	2	1 (50%)	1 (50%)	-	-
Ascites	9	7 (78%)	2 (22%)	-	-
Pleural effusion	12	11 (92%)	1 (8%)	-	-
Pericardial effusion	1	1 (100%)	-	-	-
Bowel thickening	6	5 (83%)	1 (17%)	-	-

RESULTS



Figure 1: enlarged lymphnode in an African patients with EPTB-HIV coinfection in december 2008



Figure 2: the same patient in april 2009 : the lymph nodes increased in size. The patient had IRIS



Figure 3: ultrasound scan of the same patient in 2011 after recovery: no more lymphnodes were present at the hepatic hilum

CONCLUSIONS

Early regression of HIV- EPTB US signs is a good prognostic indicator in patients with HIV-EPTB. IRIS seems to have a peculiar US pattern. US protocols for HIV-EPTB co-infection and their use in follow-up should be evaluated in prospective studies.

References

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