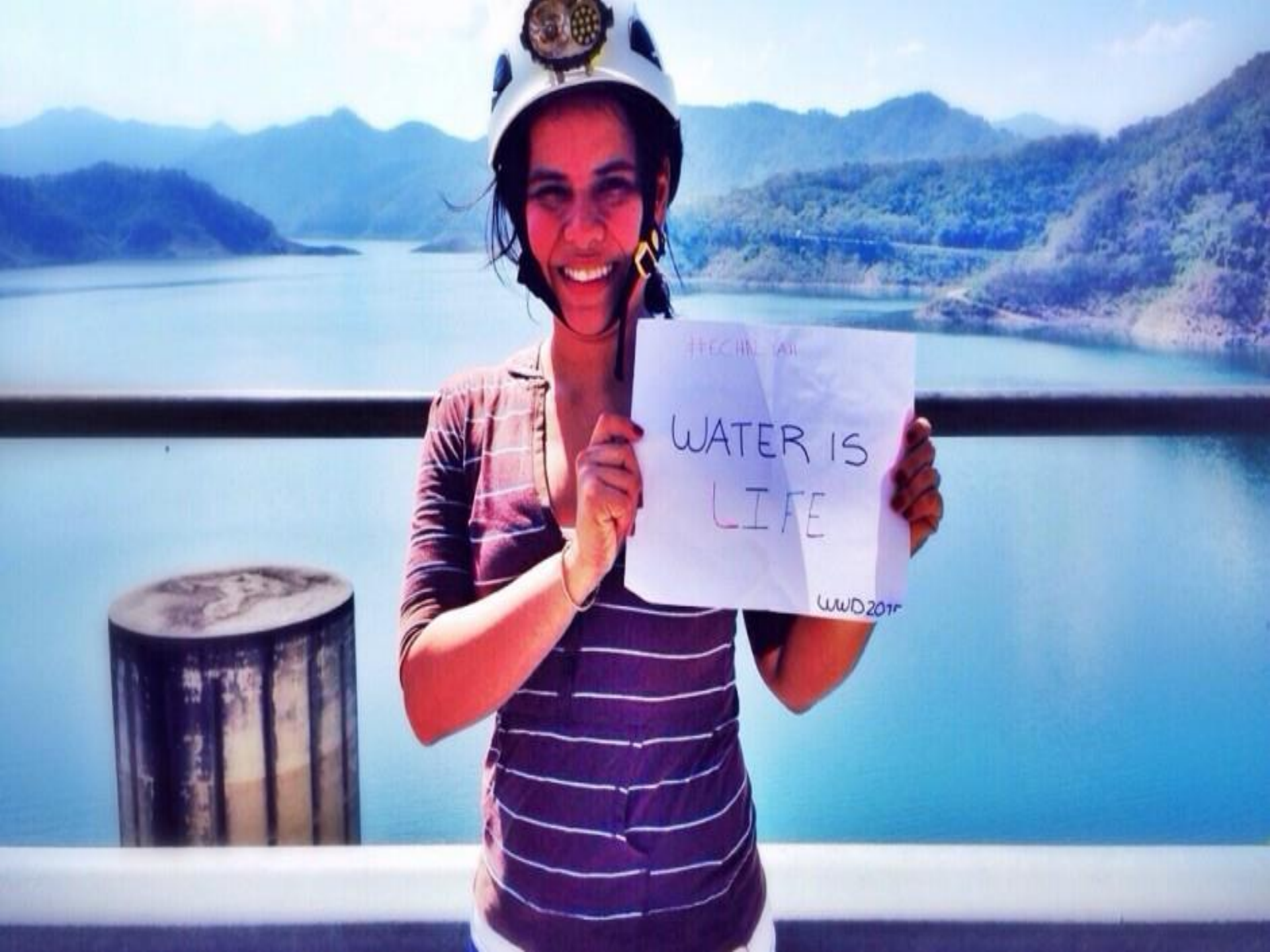






water is health

Clean hands can save your life



#ECHO LAI

WATER IS
LIFE

WWD2018

ABSTRACT n° 1370

**Iron Overload in Drinking Water (Surface and Ground)
and Liver Diseases"**

R.A.Mandour*¹ and I.EL-DOSOKI M²

*¹*Toxicology Unit, Emergency Hospital, Mansoura University, Egypt*

²Pathology Dept, Faculty of Medicine, Mansoura University, Egypt

Correspondences: mandourraafat@yahoo.com

Mansoura35516, Egypt

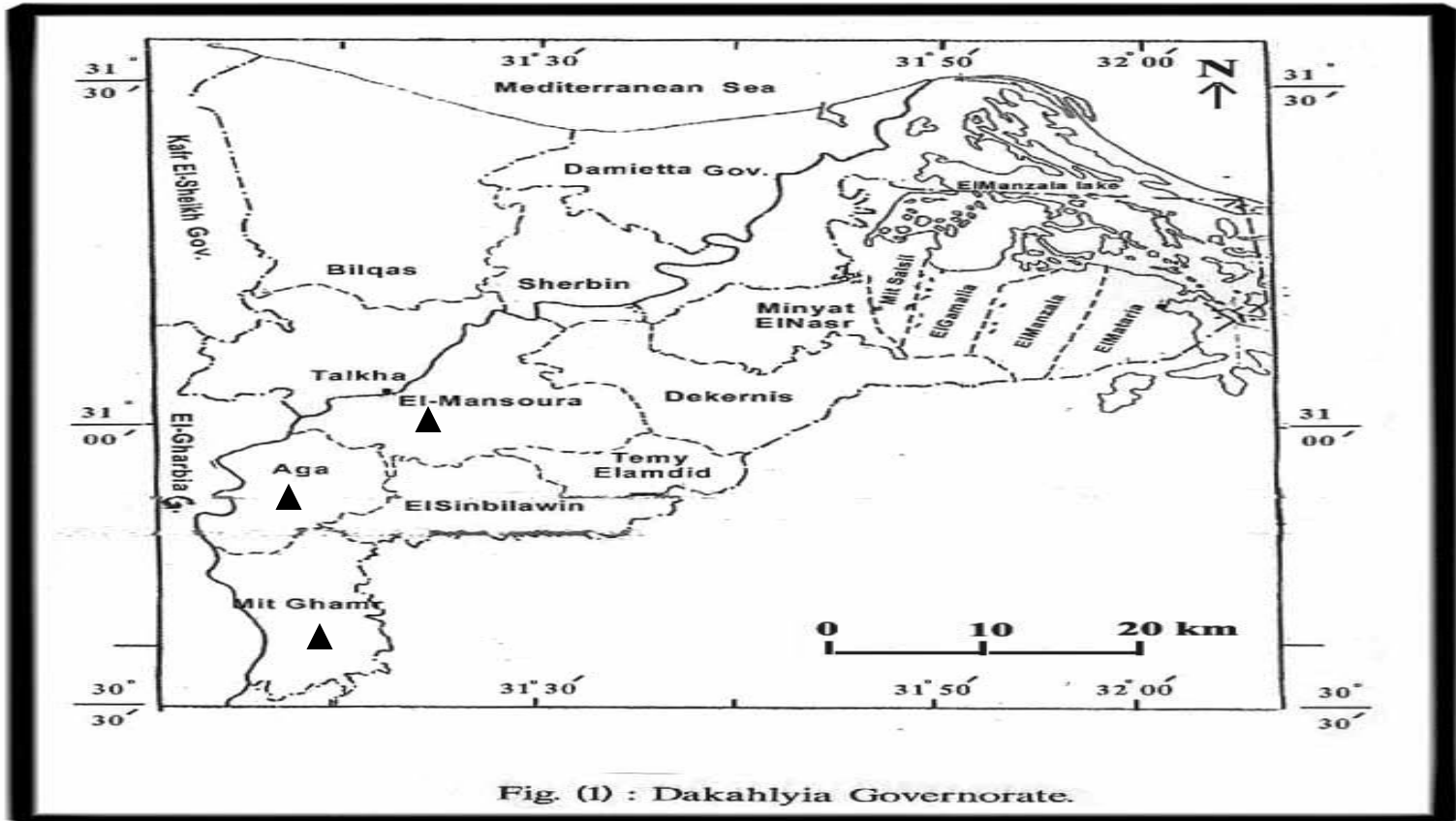
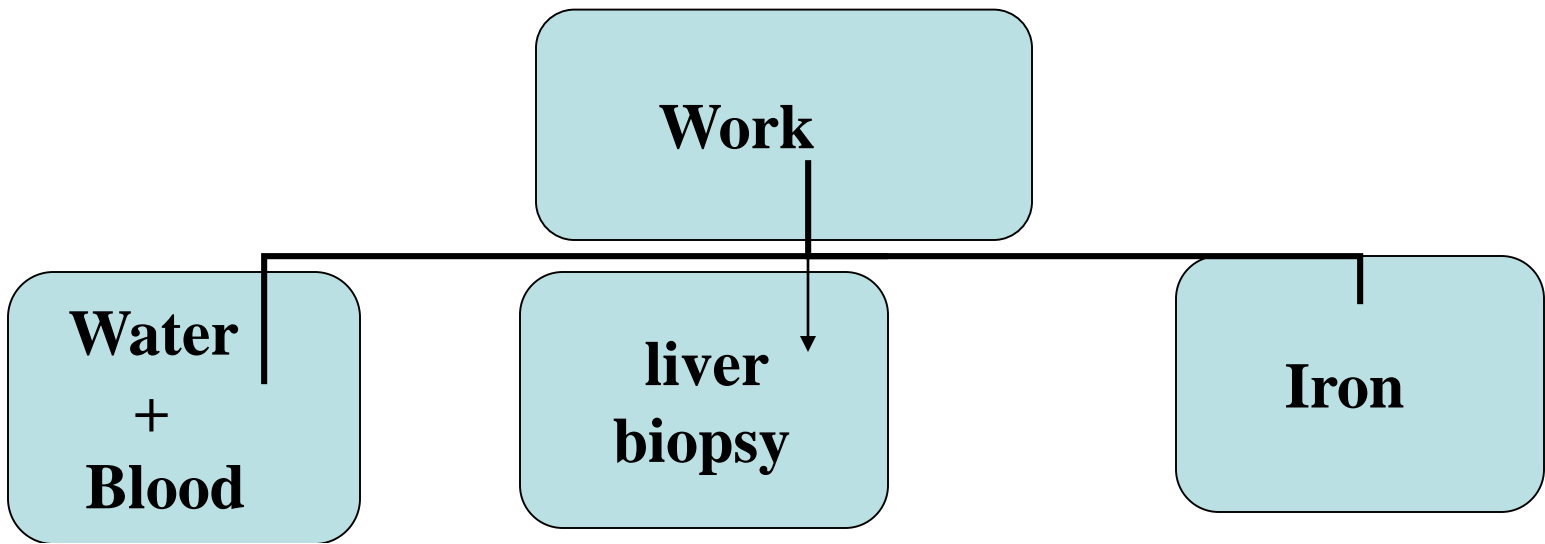
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INTRODUCTION

Metals are introduced into water systems as a result of the weathering of soils and variety of human activities. Heavy metals as reported by Wilber (1971) were known to exert adverse effects on biological processes in general. **There is a strong relationship between contaminated drinking water with heavy metals and chronic diseases such as renal failure, liver cirrhosis,** hair loss and chronic anemia have been identified, Salem *et al*, (2000). **These diseases are apparently related to the contamination of drinking water with heavy metals.**

The aim of the present work

is to investigate the impact of iron overload in drinking water on liver pathology.



Excess of iron

HSC

myofibroblast

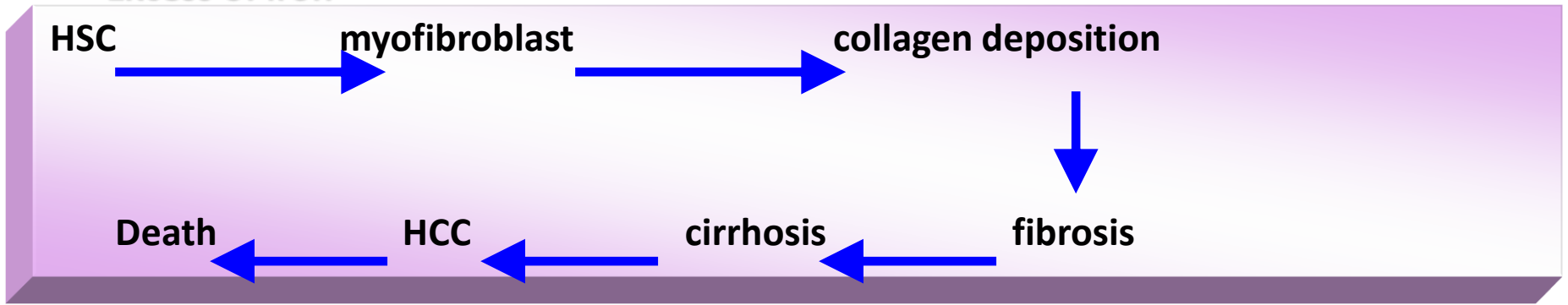
collagen deposition

Death

HCC

cirrhosis

fibrosis



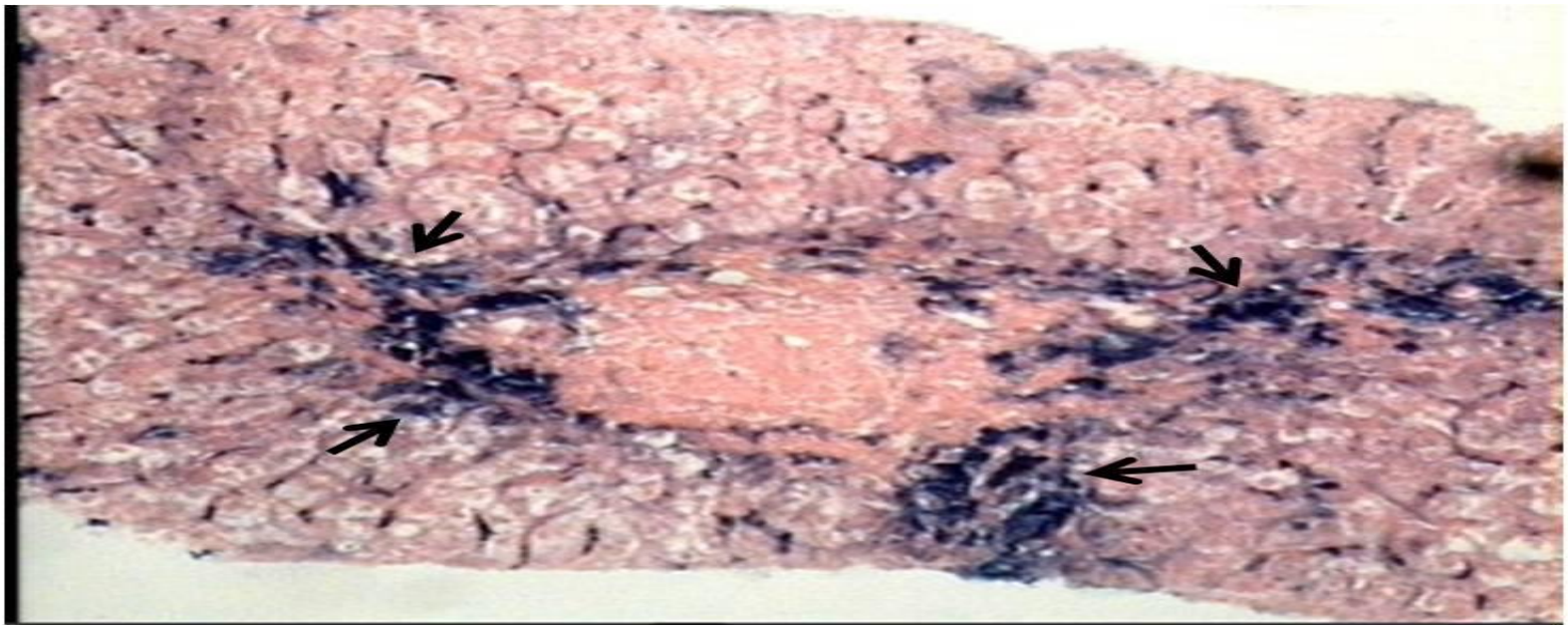


Fig 12: Prussian blue stained section showing marked hemosiderotic granules (arrows) within the cytoplasm of hepatocytes mainly in the periportal zone. 100 x.

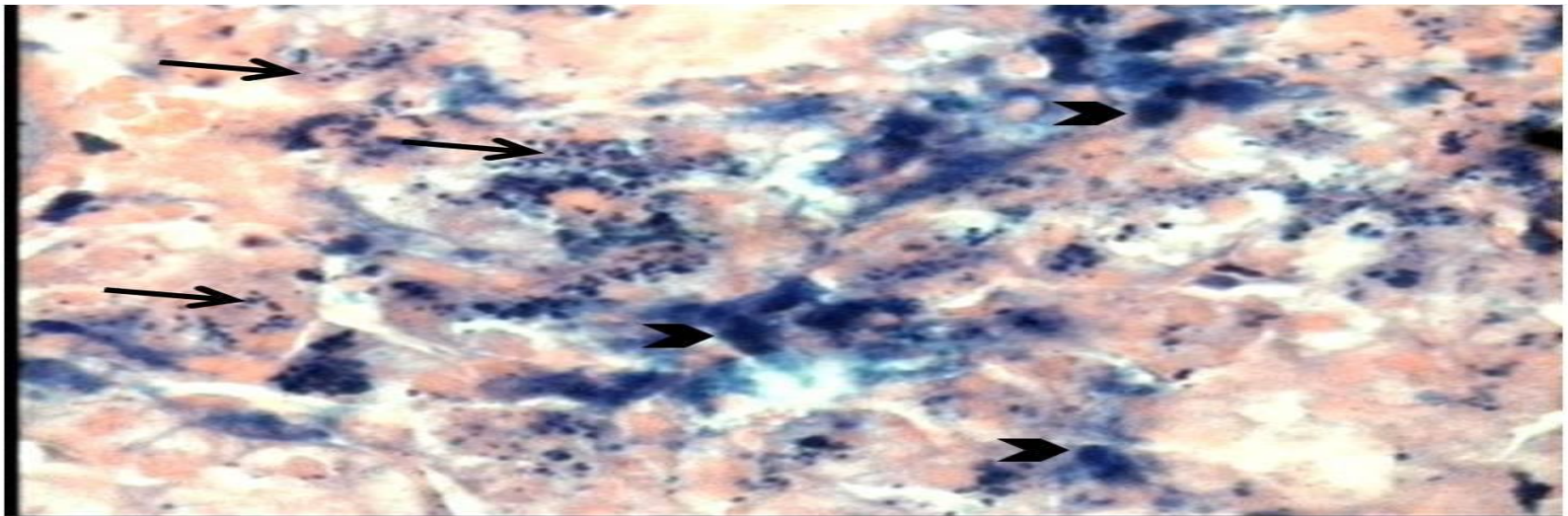
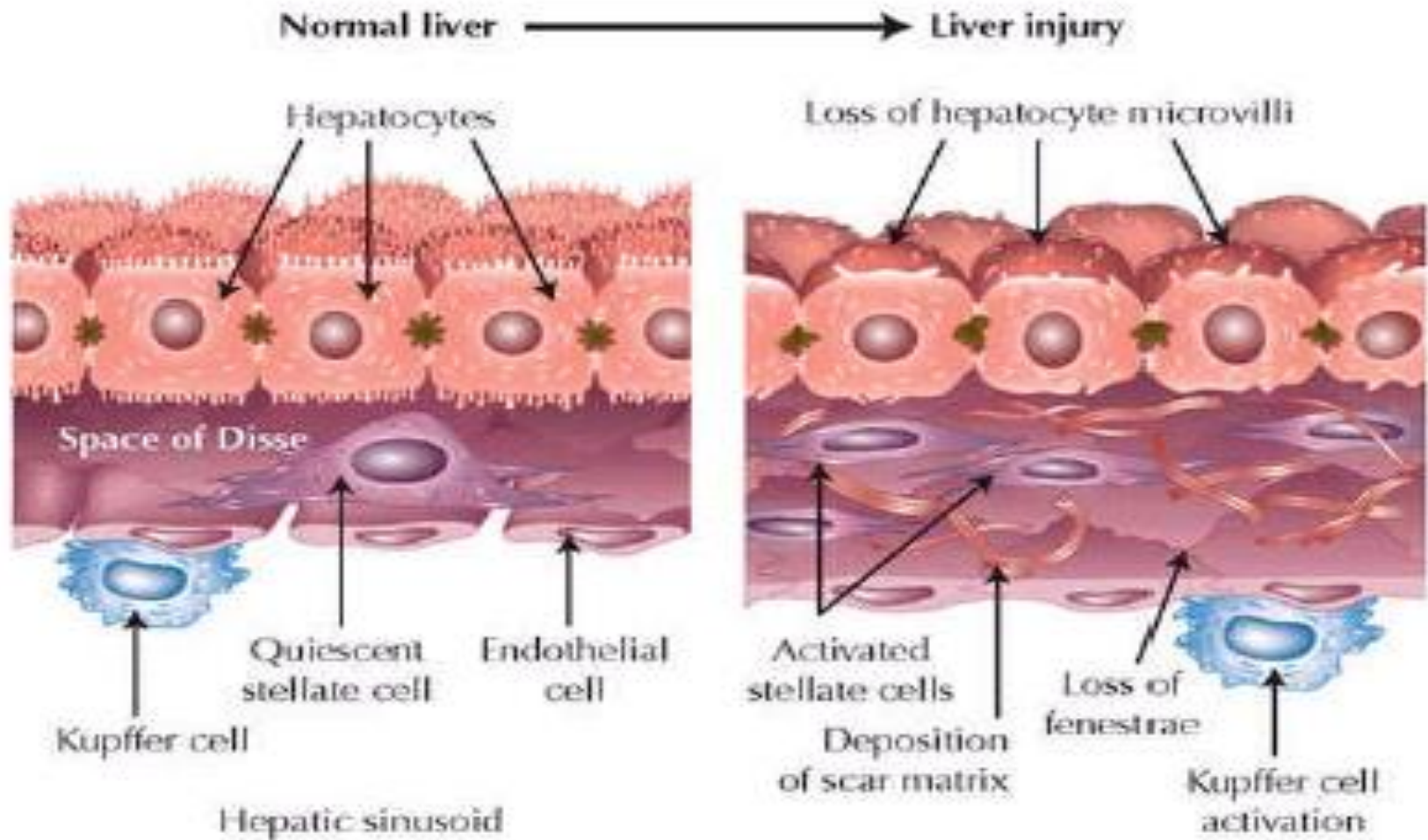


Fig 13: Prussian blue stained section showing marked hemosiderotic granules within the cytoplasm of hepatocytes (arrows) and kupffer cells (arrow heads). 400 x.



CONCLUSIONS

the polluted drinking water by iron is the direct reason for the liver disorder of the studied patients.