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Laparoscopic Aspects of Lepromatous Leprosy

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Summary

The authors performed laparoscopy on eight patients (six females and two males) with lepromatous leprosy. The findings show that *goose flesh* hepatomegaly (100 % of the cases), and red or gray splenomegaly (75 % of the cases) can be considered as laparoscopic hallmarks of lepromatous leprosy.

Key-Words: Laparoscopic aspects, Leprosy

Introduction

Hepatic biopsy shows granulomata in 60 % of patients with lepromatous leprosy. The granulomata, which are usually small and multiple, consist of foam cells located in the interior of the sinusoids, in the portal areas or in any other part of the lobule (1, 2, 3, 4, 5). These granulomata are manifested endoscopically by the characteristic *goose flesh* visible on the surface of the liver.

The spleen, with its wealth of reticuloendothelial cells, also reacts to Hansen's bacillus, giving rise to splenomegaly. This splenomegaly can be due to lepromatous lesions with foam cells and bacilli, but it is not exceptional to see amyloidosis and of course, a non-specific reaction (6).

Material and Method

During the past year, we have studied eight cases of lepromatous leprosy: six females and two males, with an average age of 38 years and with typical skin involvement, most of them treated as out-patients. Hepatic function showed minimal alterations in seven of the patients, and hepatomegaly and/or splenomegaly was clinically evident in four (Table 1).

Table 1 General characteristics of the eight patients with lepromatous leprosy

Number of cases	8	
Females	6	
Males	2	
Average age / Range	38.37/30-50	yrs.
Outpatients	7	
Under treatment	8	
Skin involvement	8	
Typical hepatic biopsy	8	
Slightly altered hepatic function	7	
Hepatomegaly (clinically detected)	4	
Splenomegaly (clinically detected)	4	

Laparoscopy was performed on all of them in the morning, after an overnight fast. Under local lignocaine hydrochloride anesthesia, the laparoscopy trocar was inserted 3 to 4 cm above the umbilicus.

Results

At laparoscopy, hepatomegaly was evidenced in all of the cases, the liver usually showing a reddish coloration, depressions and *goose flesh*. In all cases the consistance of the organ was intermediate and the edge tended to sharpen (Table 2).

The spleen was found to be enlarged in six patients, and nodules were found in four. Other less specific findings were adhesions and perisplenitis (Table 3).

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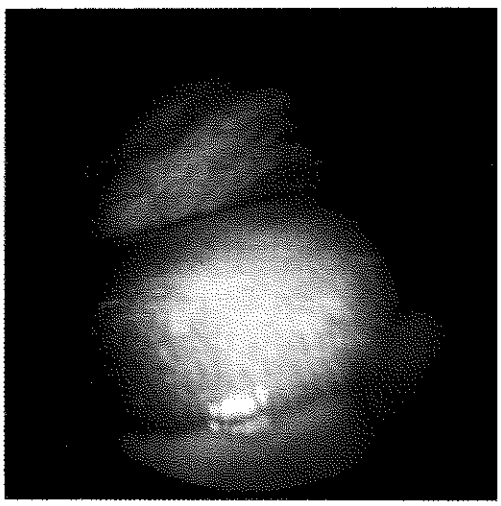
Table 2 Laparoscopic characteristics of the liver in the eight cases studied

Findings	*Number of cases*	*% (of cases)*
Hepatomegaly	8	100
Goose flesh	8	100
Reddish color	6	75
Depressions	7	87
Perihepatitis	3	25
Adhesions	2	25
Vascular alterations	0	0
Slightly sharpened edge	6	75
Intermediate consistency	8	100



Figs. 1 and 2 *Goose flesh* appearance of the liver in lepromatous leprosy

Table 3 Laparoscopic characteristics of the spleen in the eight cases studied

Findings	*Number of cases*	*% (of cases)*
Splenomegaly	6	75
Red or gray color	8	100
Nodules	4	50
Adhesions	3	35.5
Perisplenitis	2	25

Table 4 Other laparoscopic findings in the eight patients

Findings	*Number of cases*	*% (of cases)*
Normal gallbladder	8	100
Normal stomach	8	100
Normal intestine	8	100
Normal uterus and adnexa	8	100
Normal omentum	8	100
Normal round, falciform and phrenicocolic ligaments	8	100
Altered peritoneum	1	12.5 %

In the rest of the abdominal cavity, we noted an absence of abdominal hypertension, and the other organs we were able to inspect endoscopically appeared normal, except for a few smooth, whitish spots of less than 1 cm on the peritoneum of the small pelvis and flanks (Table 4).

Discussion

Thus, the characteristic *goose flesh* appearance of the liver was found in 100 % of our patients with lepromatous leprosy. Other data are not specific, although we have noticed a high frequency of hepatomegaly and adhesions between Glisson's capsule and the parietal peritoneum.

Splenomegaly was also a frequent finding (75 %) in our patients. So we can conclude that *goose flesh* hepatomegaly and red or gray splenomegaly are the laparoscopic hallmarks of lepromatous leprosy.

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