

# ENTAMOEBA HISTOLYTICA

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**Tıp Fakültesi**  
**Parazitoloji Anabilim Dalı**

# ENTAMOEBA HISTOLYTICA

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Dünya Sağlık Örgütü verilerine göre her yıl 500 milyon kişi *E.histolytica* ile enfekte olmasına rağmen bunların yalnız %10'unda semptomatik hastalık görülmekte

Yılda 40.000-100.000 kişi ameobiasis nedeni ile ölmekte

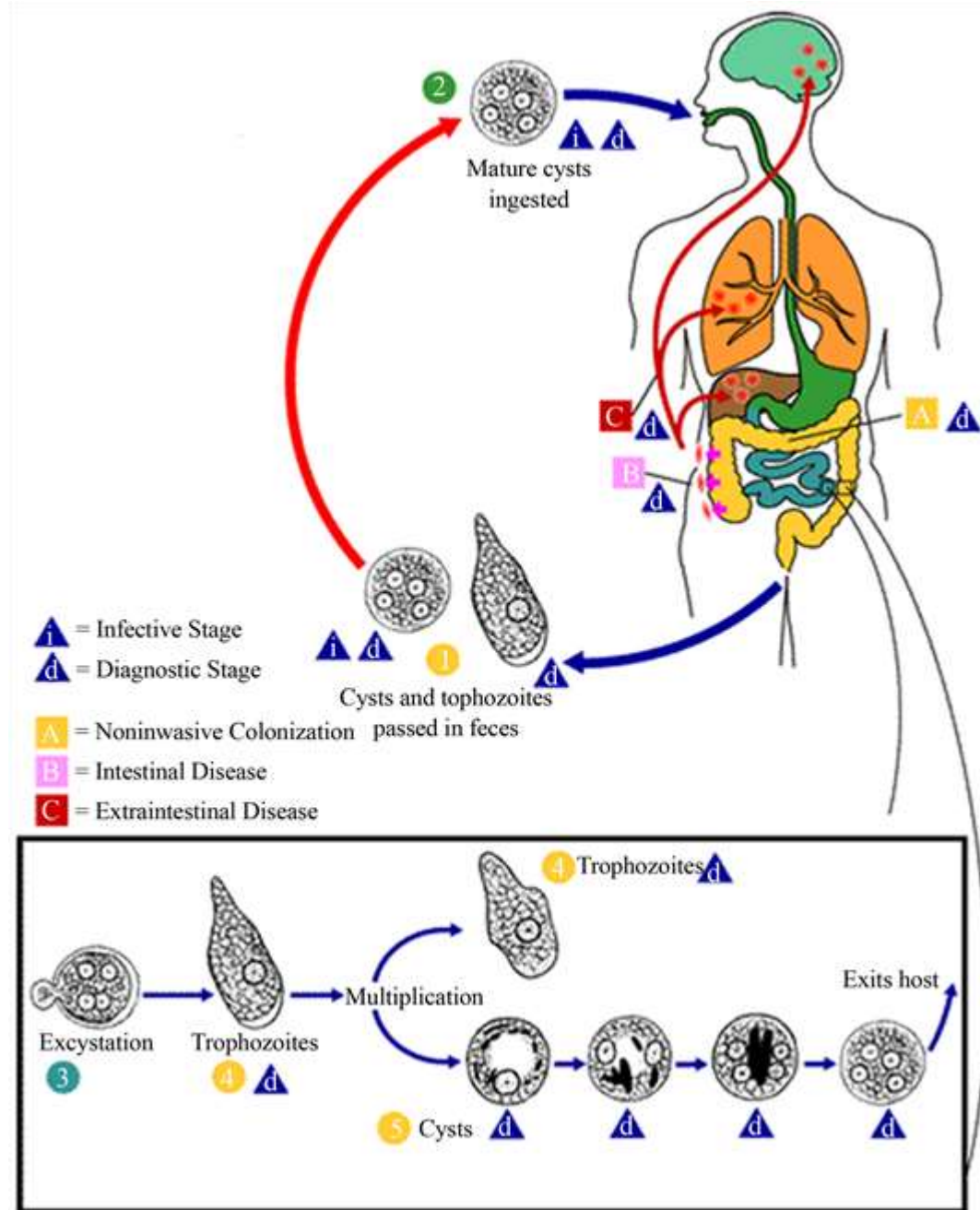
Dünyada sıtmadan sonra ikinci sıklıkta ölüme neden olan parazitik hastalık

## *E. histolytica* intestinal tutulum

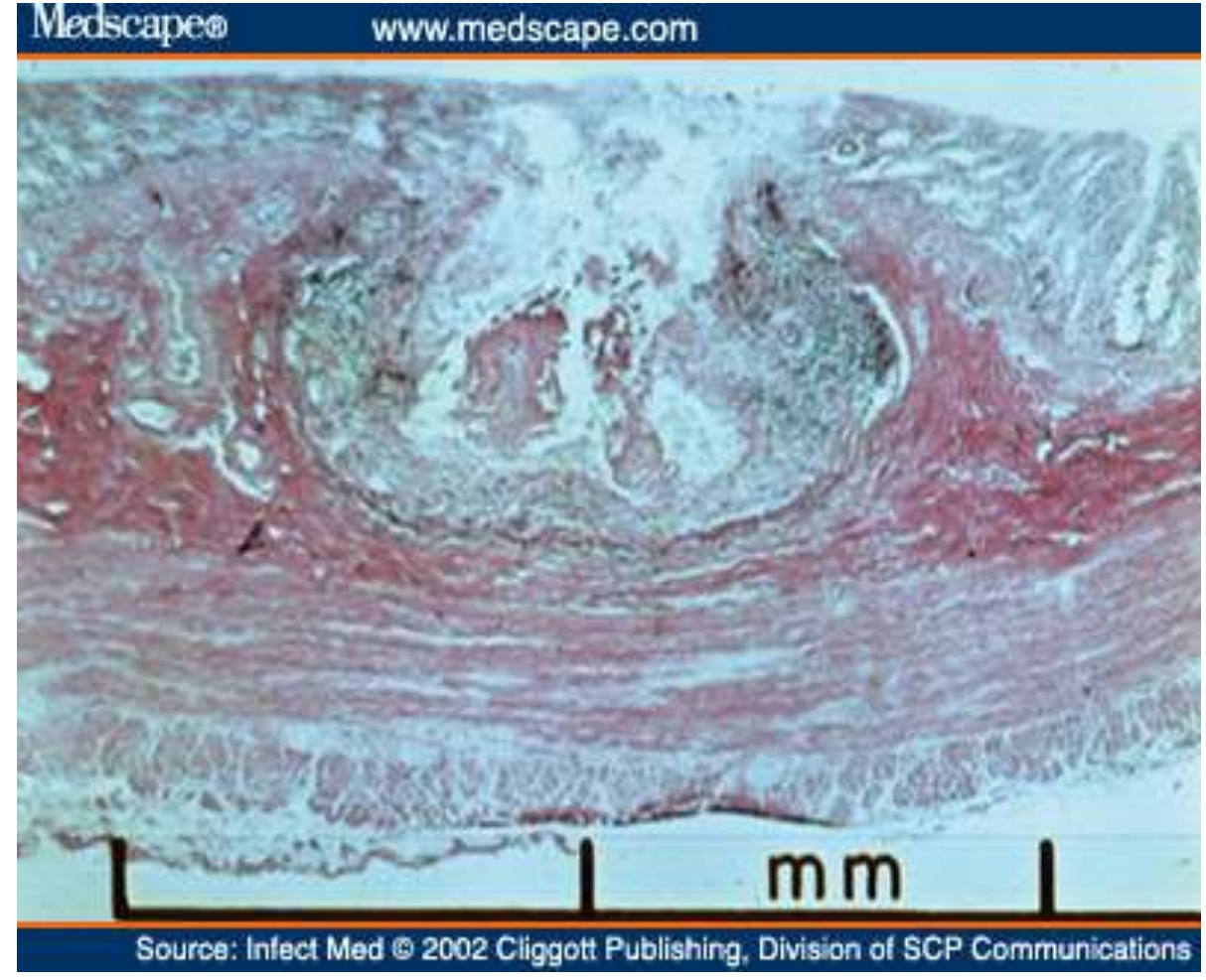
- 1-Asemptomatik
- 2-Dizanteri
- 3-Akut nekrotizan kolit
- 4-Ameboma
- 5-Toksik megakolon
- 6-Perianal fistül ve ülser

## Ekstraintestinal Ameobiasis

- Amibik Karaciğer Absesi
- Serebral Amebiasis
- Plöropulmoner Ameobiasis
- Deri Ameobiasis



# ENTAMOEBA HISTOLYTICA NEDENİ İLE OLUŞAN BAĞIRSAK ÜLSERLERİ



## CASE REPORT

# Cecal ameboma mimicking obstructing colonic carcinoma

Mutlaq Almalki\* and Waed Yaseen

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### Abstract

Ameboma is a mass of granulation tissue with peripheral fibrosis and a core of inflammation related to amebic chronic infection. The initial presentations of colonic ameboma usually include obstruction and low gastrointestinal bleeding. It may mimic colon carcinoma or other granulomatous inflammatory conditions of the colon in both the clinical presentation and the endoscopic appearance. Here, we report a case of a 45-year-old male with a presentation of abdominal pain and constipation, as well as clinical, radiological and endoscopic presentation resembling colonic carcinoma, that was managed operatively with right hemicolectomy and post-operative histopathologic finding of cecal ameboma.

A



B



A



B



(A) and (B) Resected bowel of a 45-year-old male with an obstructing right-sided colonic mass.

(A) and (B) Abdomen CT with IV and oral contrast showed small bowel obstruction secondary to cecal mass.

# **İNTESTİNAL ameobiasis LABORATUVAR TANI**

**DIŞKININ MİKROSKOBİK BAKISI VE KÜLTÜR**

**DIŞKIDA ANTİJEN ARAYAN TESTLER**

**PCR**



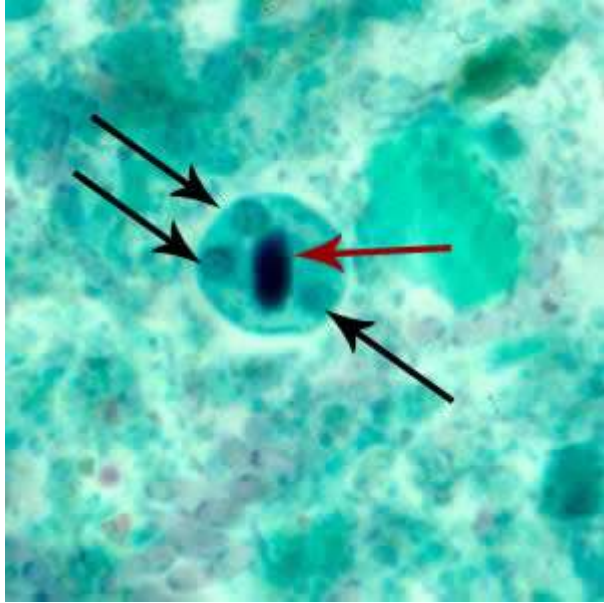
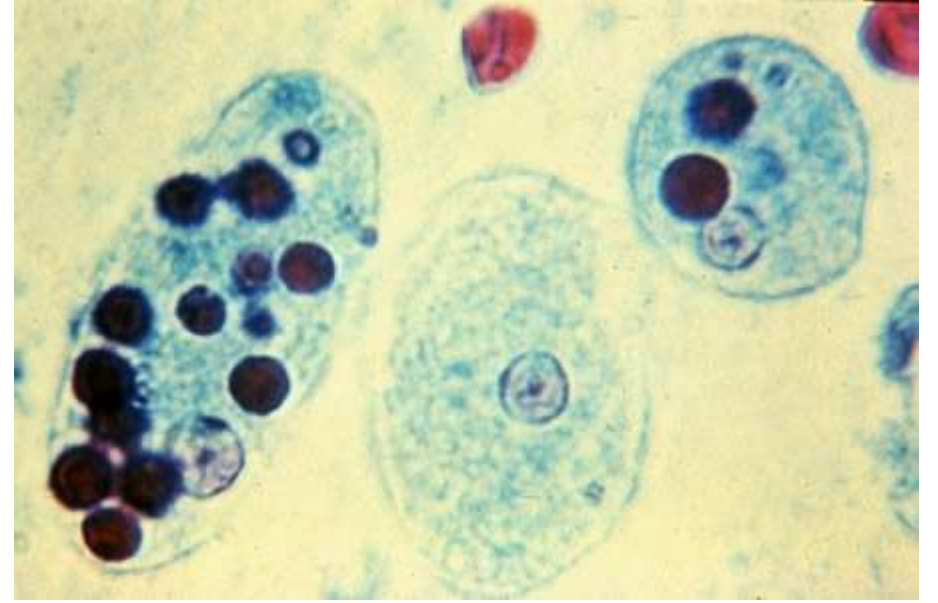
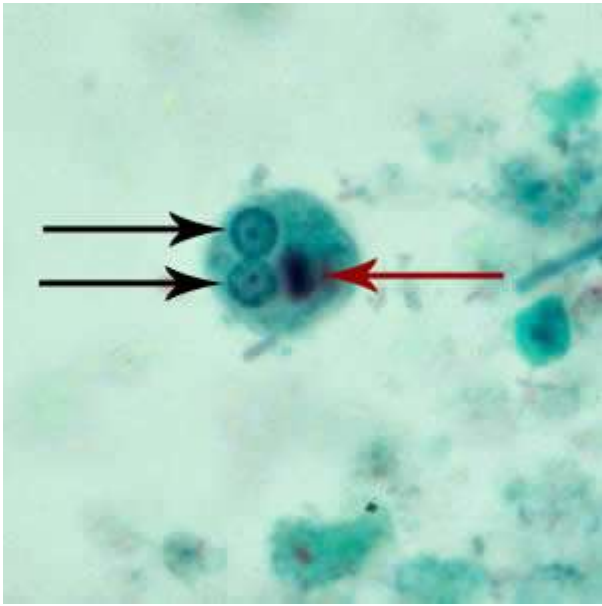
E.histolytica/E.dispar kist direkt ve lugol (iyot) ile bakı



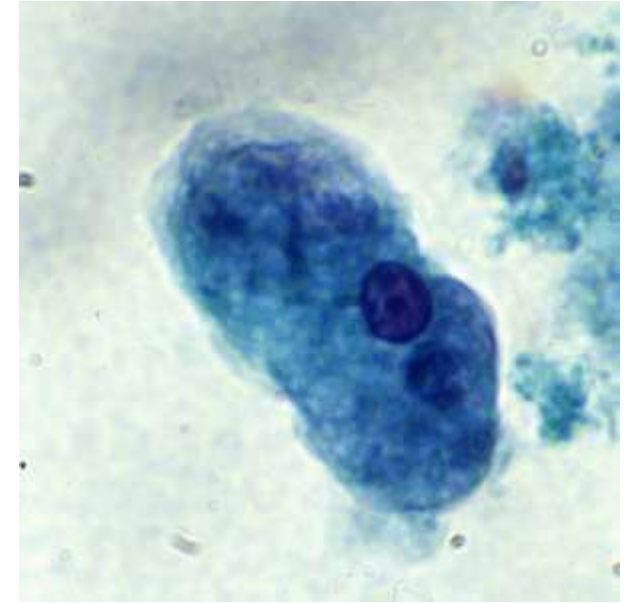


E.histolytica/E.dispar trofozoit lugol (iyot) ile direkt bakı





*E. histolytica*/*E. dispar* trofozoit ve kistleri trikrom boyama lugol



## A review of amoebic liver abscess for clinicians in a nonendemic setting

Terry Wuerz MD<sup>1\*</sup>, Jennifer B Kane MD<sup>2,4</sup>, Andrea K Boggild MD<sup>3</sup>, Sigmund Kraiden MD<sup>4</sup>, Jay S Keystone MD<sup>3</sup>, Milan Fuksa DSc<sup>4</sup>, Kevin C Kain MD<sup>3,5</sup>, Ralph Warren MD<sup>6</sup>, John Kempston MD<sup>4</sup>, Joe Anderson MD<sup>4</sup>

Amoebic liver abscess (ALA) is an uncommon but potentially life-threatening complication of infection with the protozoan parasite *Entamoeba histolytica*. *E histolytica* is widely distributed throughout the tropics and subtropics, causing up to 40 million infections annually. The parasite is transmitted via the fecal-oral route, and once it establishes itself in the colon, it has the propensity to invade the mucosa, leading to ulceration and colitis, and to disseminate to distant extraintestinal sites, the most common of which is the liver. The authors provide a topical review of ALA and summarize clinical data from a series of 29 patients with ALA presenting to seven hospitals in Toronto, Ontario, a nonendemic setting, over 30 years.



Figure 2) Noncontrast computed tomography image demonstrating right-sided amoebic liver abscess in a patient presenting to care in Toronto, Ontario, after international travel. The abscess is homogenous and single, which is a typical finding

### BOX 1 Characteristics of 29 patients presenting to seven hospitals in Toronto, Ontario, between 1980 and 2005

|   |                              |
|---|------------------------------|
| Age, years, median (range)                                  | 33 (22–54)                   |
| Male sex  | 24 (83)                      |
| History of travel to the tropics                            | 25 (86)                      |
| Time between travel and symptom onset, median (range)       | 28 weeks (1 day to 14 years) |
| Duration of symptoms before diagnosis, days, median (range) | 14 (2–271)                   |
| Region of travel  |                              |
| South Asia  | 10 (40)                      |
| North Africa or Middle East                                 | 3 (12)                       |
| South America   | 3 (12)                       |
| Central America or Caribbean                                | 3 (12)                       |
| Sub-Saharan Africa  | 3 (12)                       |
| Southeast Asia  | 1 (4)                        |
| Pacific Islands   | 1 (4)                        |
| Symptoms at presentation                                    |                              |
| Fever   | 26 (90)                      |
| Anorexia  | 19 (66)                      |
| Abdominal pain  | 16 (55)                      |
| Weight loss   | 14 (48)                      |
| Right chest pain  | 12 (41)                      |
| Diarrhea or dysentery                                       | 11 (38)                      |
| Signs at presentation                                       |                              |
| Fever   | 23 (79)                      |
| Right upper quadrant tenderness                             | 22 (76)                      |
| Epigastric tenderness                                       | 15 (52)                      |
| Right basilar lung signs                                    | 8 (28)                       |
| Icterus   | 7 (24)                       |
| Diagnostics   |                              |
| Stool trophozoite seen                                      | 7 (24)                       |
| Serology positive   | 27 (93)                      |

Data presented as n (%) unless otherwise indicated

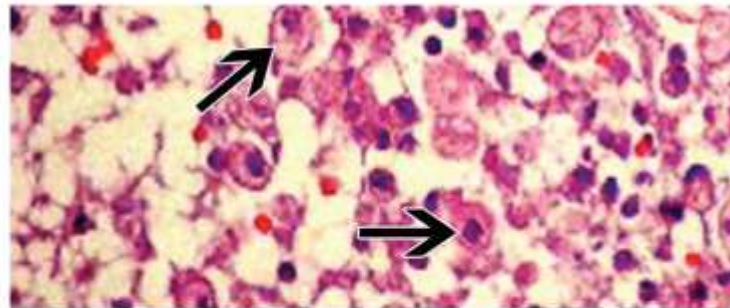
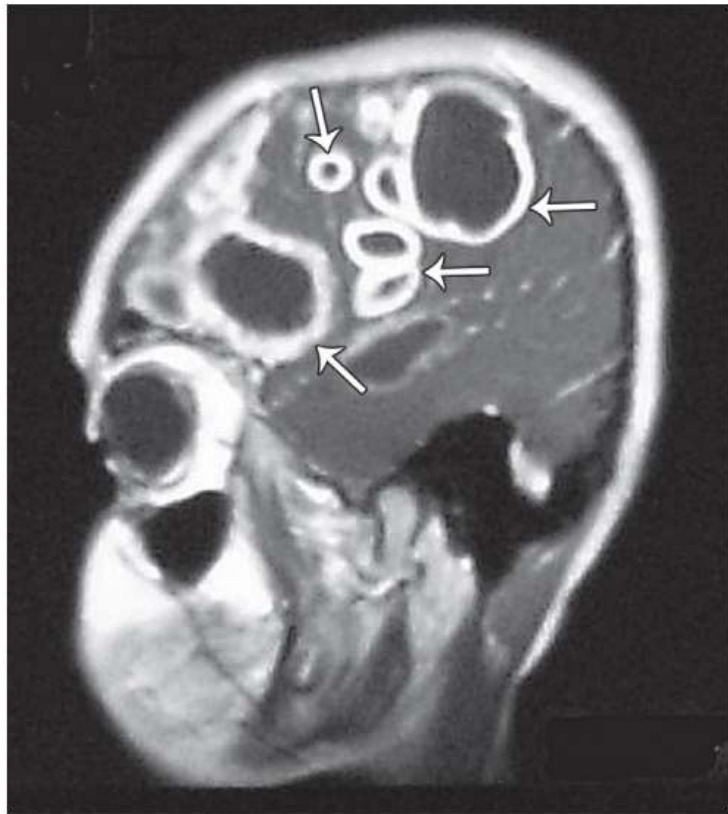
### BOX 3 Comparison of epidemiological and clinical features of pyogenic and amoebic liver abscesses

| Feature   | Pyogenic abscess                | Amoebic liver abscess                           |
|---|---------------------------------|---|
| Sex bias  | No                              | Males   |
| Typical age at presentation                         | Fifth to seventh decade of life | Third decade of life                            |
| History of tropical travel                          | Uncommon                        | Almost universal                                |
| Underlying hepatobiliary comorbidities              | Very common                     | Uncommon  |
| Number of abscesses                                 | Often small and multiple        | Usually single; right lobe                      |
| Hypoalbuminemia                                     | Uncommon                        | Common  |
| Positive blood or aspirate bacterial cultures       | Common                          | Rare  |
| Elevation of the right hemidiaphragm on chest x ray | Uncommon                        | Common  |
| Amoebic serology                                    | Negative                        | Positive in 90% within 2 weeks of symptom onset |

## Case Reports

# A rare case of multilocus brain abscess due to *Entamoeba histolytica* infection in a child

Gülden S. Tamer, MD, PhD, Selim Öncel, MD, Sevil Gökbulut, MD, Emin S. Arisoy, MD.



**Figure 2** - Amebic trophozoites as shown with arrows. Note the neutrophilic and lymphomononuclear infiltrates (Hematoxylin & Eosin) (x400).

Brain abscess due to *Entamoeba histolytica* (*E. histolytica*) may pose a diagnostic problem or a therapeutic challenge, as evidenced by the paucity of papers reporting complete recovery after treatment. An 11-year-old girl presented with progressive drowsiness, diminished movements of the left upper limb, and swallowing problems. Cranial MRI showed multiple, contrast-dense masses with fluid content. She was started on meropenem. Surgical drainage was performed. No bacterial or fungal growth was observed in drainage samples. *Entamoeba histolytica* trophozoites were detected in the tissue sample. Intravenous metronidazole was started and continued for 6 weeks, at the end of which abscesses were found and to have shrunk considerably. Intravenous therapy was switched to oral metronidazole, which was continued for 2 weeks. She regained all her preexisting abilities. Multiple brain abscesses due to *E. histolytica* is a very rare occurrence, and histopathologic evaluation is important in diagnosis.

*Saudi Med J* 2015; Vol. 36 (3): 356-358  
doi: 10.15537/smj.2015.3.10178

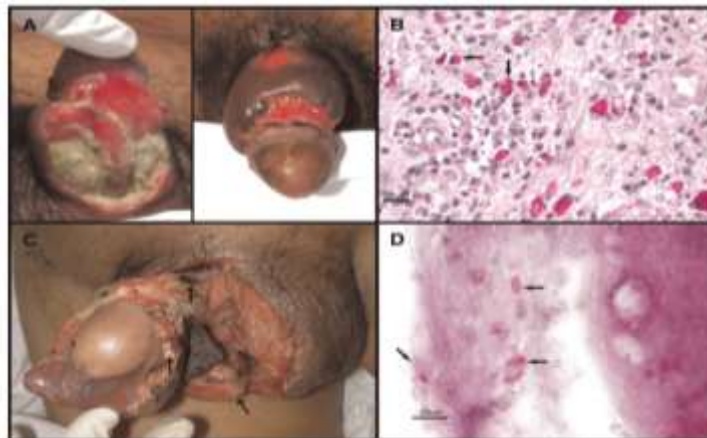
- Cranial MRI revealed multiple, contrast-dense masses (abscesses) with fluid content and circumferential edema in the right frontotemporoparietal region (arrows).

## Case Report: Cutaneous Amebiasis: The Importance of Molecular Diagnosis of an Emerging Parasitic Disease

Patricia Morán, Liliana Rojas, René Cerritos, Valeria Zermeño, Alicia Valadez, Griselda Montes de Oca, Miguel Ángel Reyes, Enrique González, Oswaldo Partida, Eric Hernández, Miriam Nieves, Tobías Portillo, Marco Gudiño, Manuel Ramiro, and Cecilia Ximénez\*

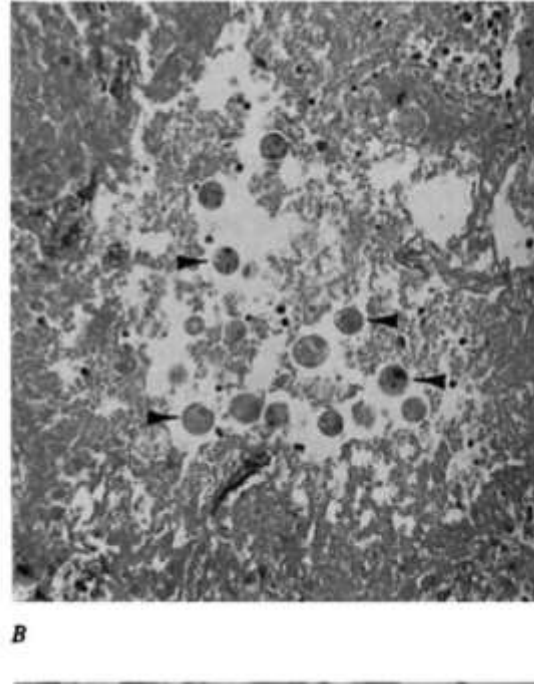
*Department of Experimental Medicine, Faculty of Medicine, National Autonomous University of Mexico (UNAM), Mexico City, Mexico; Dermatology Department, General Hospital of Mexico, Ministry of Health, Mexico City, Mexico; Urology Department, General Hospital of Mexico, Ministry of Health, Mexico City, Mexico; Unit of Education, Scientific Research and Health Policy Direction of Medical Benefits, Mexican Institute of Social Security Mexico City, IMSS, Mexico*

**Abstract.** Cutaneous amebiasis is the least common clinical form of human amebiasis in Mexico, sexual amebiasis was only occasionally observed before the late 1980s. However, in the last few decades, most of the documented cases of cutaneous amebiasis from around the world are sexually transmitted. We present two cases of sexually transmitted genital amebiasis. The molecular characterization of the *Entamoeba* species in the affected tissues underlines the importance of an etiological diagnosis using specific and sensitive techniques that avoid the rapid destruction of tissues and the irreversible sequelae to the anatomy and function of the affected organs. In addition, for those interested in the study of the human-amoebic disease relationship and its epidemiology, the detection of a new, mixed infection in an invasive case of amebiasis reveals new perspectives in the study of the extraordinarily complex host-parasite relationship in amebiasis.



# Thoracic amebiasis

S.M. Shamsuzzaman, Y. Hashiguchi, Clin Chest Med 23 (2002) 479– 492



## Types of lung involvement

| Type of lesion               | Percent |
|------------------------------|---------|
| Hepatobronchial fistula      | 47      |
| Pleural effusion and empyema | 19      |
| Lung abscess                 | 14      |
| Consolidation                | 10      |

Entamoeba histolytica involving the right lung after rupture of a hepatic abscess through the right hemidiaphragm. (A) Chest radiograph shows elevated right hemidiaphragm, right lower lobe infiltrate, and effusion. (B) Cysts of amebae in lung tissue

# **EKSTRAİNTESTİNAL AMEOBİASİS LABORATUVAR TANI**

**DIŞKININ MİKROSKOBİK BAKISI VE KÜLTÜR???**

**KANDA ANTİKOR ARAYAN TESTLER (IHA)**

**ÖRNEĞİN MİKROSKOBİK BAKISI**

# **DIŐKI ÖRNEKLERİNİ BAŐKA BİR MERKEZE GÖNDERİLMESİ**

**ÜÇLÜ KAP**

**1-NORMAL DIŐKI**

**2-%10 FORMOL**

**3-PVA FİKSATİFİ İÇİNDE**

**KATI DIŐKILAR 2-8 °C' DE SAKLANIRSA 24 SAAT İÇİNDE İNCELENEBİLİR**

# DIŐKI ÖRNEKLERİNİ RAPORLANMASI

Sadece direkt mikroskopik bakı incelendiyse;

**DIŐKIDA *E.histolytica*/*E.dispar* KİST VE/VEYA TROFOZOİDLERİ  
SAPTANDI**

Direkt mikroskopik bakıya ilaveten trikrom yapıldıysa;

**TRİKROM BOYALI PREPARATTA ERİTROSİT İÇEREN *E.histolytica*  
GÖZLENDİ**

PCR ve/veya *E.histolytica* spesifik antijen arayan testler yapılabildiyse:

**DIŐKIDA *E.histolytica* SAPTANDI**