Pandemi Döneminde Zor Olgular

Olgu 2

Dr. Zuhal YEŞİLBAĞ

Bakırköy Dr. Sadi Konuk Eğitim Araştırma Hastanesi
İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Kliniği

Olgu

Kasım 2019

- 37 yaş, erkek, evli, ilkokul mezunu, heteroseksüel
- İstanbul'da yaşıyor, tekstil işinde çalışıyor
- Ekim 2019'da inguinal herni operasyonu öncesi
- Aktif şikayeti yok
- HIV RNA: 84 710 kopya/mL
- CD4+ T lenfosit sayısı: 561 hücre/µL (%18)

- Özgeçmiş: Bilinen bir hastalık öyküsü yok, ilaç veya madde kullanımı yok, sigara 15 paket/yıl, alkol yok

- 2014 veya 2015'de kan bağışında bulunmuş. Hepatit B olduğu söylenmiş ama sonrasındaki tetkiklerde tespit edilmemiş.

- Soygeçmiş: Babada DM dışında özellik yok.

- FM: Patolojik bulgu yok.

Aralık 2019

- TDF/FTC + DTG başlandı

ART 8. ay (ağustos 2020)

- HIV RNA: negatif

- CD4+ T lenfosit sayısı: 716 hücre/µL (%22)

ART 17. ay

ART uyuncu tam

- 3 ay önce başlayan, karın ağrısının eşlik ettiği başlangıçta günde 20'ye kadar çıkan kanlı ishal, sonrasında günde 2-3 defa olacak şekilde sulu dışkılamaya dönüşmüş.

- Genel Cerrahi başvurusu: hemoroid tedavisi, ikinci başvuruda kolonoskopi

- Kolonoskopiden sonra şikayetleri azalmış. Kontrole gitmemiş.

- Bu süreçte ART dışında herhangi bir tedavi uygulanmamış.

HIV ile yaşayan kişide ishal ?

Enteric pathogens

Pathogen	Small bowel	Colon
Bacteria	*Salmonella**	*Campylobacter**
	Escherichia coli¶	*Shigella*
	Clostridium perfringens	*Clostridioides difficile*
	Staphylococcus aureus	*Yersinia*
	Aeromonas hydrophila	*Vibrio parahaemolyticus*
	Bacillus cereus	Enteroinvasive *E. coli*
	Vibrio cholerae	*Plesiomonas shigelloides*
		Klebsiella oxytoca (rare)
Virus	Rotavirus	Cytomegalovirus*
	Norovirus	Adenovirus
	Astrovirus	Herpes simplex virus
Protozoa	*Cryptosporidium**	*Entamoeba histolytica*
	*Microsporidium**	
	Cystoisospora	
	Cyclospora	
	Giardia lamblia	

* Can involve both the small and large bowel, but are most likely to occur as listed.
¶ EPEC, EAggEC, EHEC, ETEC may all contribute; routine laboratories and cultures will not differentiate these from E. coli which are normal flora.

Causes of diarrhea in patients with AIDS

Protozoal	Bacterial
*Microsporidium**	*Salmonella**
*Cryptosporidium**	*Campylobacter**
Isospora belli	*Mycobacterium avium* complex
Giardia lamblia	*Mycobacterium tuberculosis*
Entamoeba histolytica	Clostridioides (formerly *Clostridium*) *difficile*
Leishmania donovani	*Shigella*
Blastocystis hominis	Small bowel bacterial overgrowth
Cyclospora sp	*Vibrio* sp
Viral	**Fungal**
Cytomegalovirus*	Histoplasmosis
Herpes simplex	Coccidiomycosis
Adenovirus	**Idiopathic**
Rotavirus	"AIDS enteropathy"
Norwalk	
HIV	
Gut neoplasms	
Lymphoma	
Kaposi's sarcoma	
Pancreatic insufficiency	

* More frequent.

İSTANBUL BAKIRKÖY DR. SADİ KONUK EĞİTİM VE ARAŞTIRMA HASTANESİ

CERRAHİ ENDOSKOPİ ÜNİTESİ

Hasta Adı,Soyadı :

Cinsiyet / Yas : E-38

İslem Tarihi : 01.06.2021

Protokol No : 57673326166

KOLONOSKOPİ RAPORU

Sonuç: Ülseratif kolit şüphesi (özellikle rektum ağırlıklı)

ART 18. ay

- 10 gündür olan ve son 3-4 gündür uykudan uyandıran başağrısı nedeniyle dış merkez başvurusu

- Kontrastsız kraniyal BT:
  - Sağ temporal lob düzeyinde çevresinde geniş hipodens ödem alanı izlenen geniş yerinde çapı 38 mm olarak ölçülen kitle lezyon
- Toraks BT: normal

Kontrastlı Kraniyal MRG ve diffüzyon MRG:

Sağ temporooksipital lobda en geniş boyutu **38x25 mm** boyutlarında ilk planda **beyin apsesi**

ART 18. ay

- Hasta ileri tetkik ve tedavi için servise yatırıldı.

Şikayet

- Başağrısı,
- Baş dönmesi
- Uykusuzluk
- Günde 2-3 kez olan kansız, yarı katı dışkılama
- Son 3 ayda 12-15 kilo kayıp.

Fizik muayene

- Genel durum iyi, bilinç açık, koopere, oryante,
- Ateş: 37.3°C, nabız: 88/dk, TA: 110/70 mmHg, solunum sayısı: 16/dk
- Solunum sesleri doğal
- Batın rahat, HSMG (-)
- KVAH -/-
- **Ense sertliği (-), MİB (-)**

- Ateş veya gece terlemesi tariflemiyor. İstanbul'da yaşıyor, seyahat öyküsü yok.

Laboratuvar bulguları

WBC: 14.3 10^3/uL
Hb:11.1 g/dL
Htc: % 35.8
CRP: 36.6 mg/dL (7 kat artış)
CK: 406 U/L (0-171)
Albumin: 38.8 g/L

HIV RNA: negatif
CD4 + T lenfosit: 465 hücre/µL (%25)

Ön tanı?

Plan?

- TDF/FTC + DTG devam

- İntrakraniyal apse ön tanısı ile
  Seftriakson 2x2 gr iv + Metronidazol 4x500 mg iv

- Beyin Cerrahisi konsültasyonu: Örnekleme/drenaj için operasyon planlandı.

- Kan kültürleri alındı.

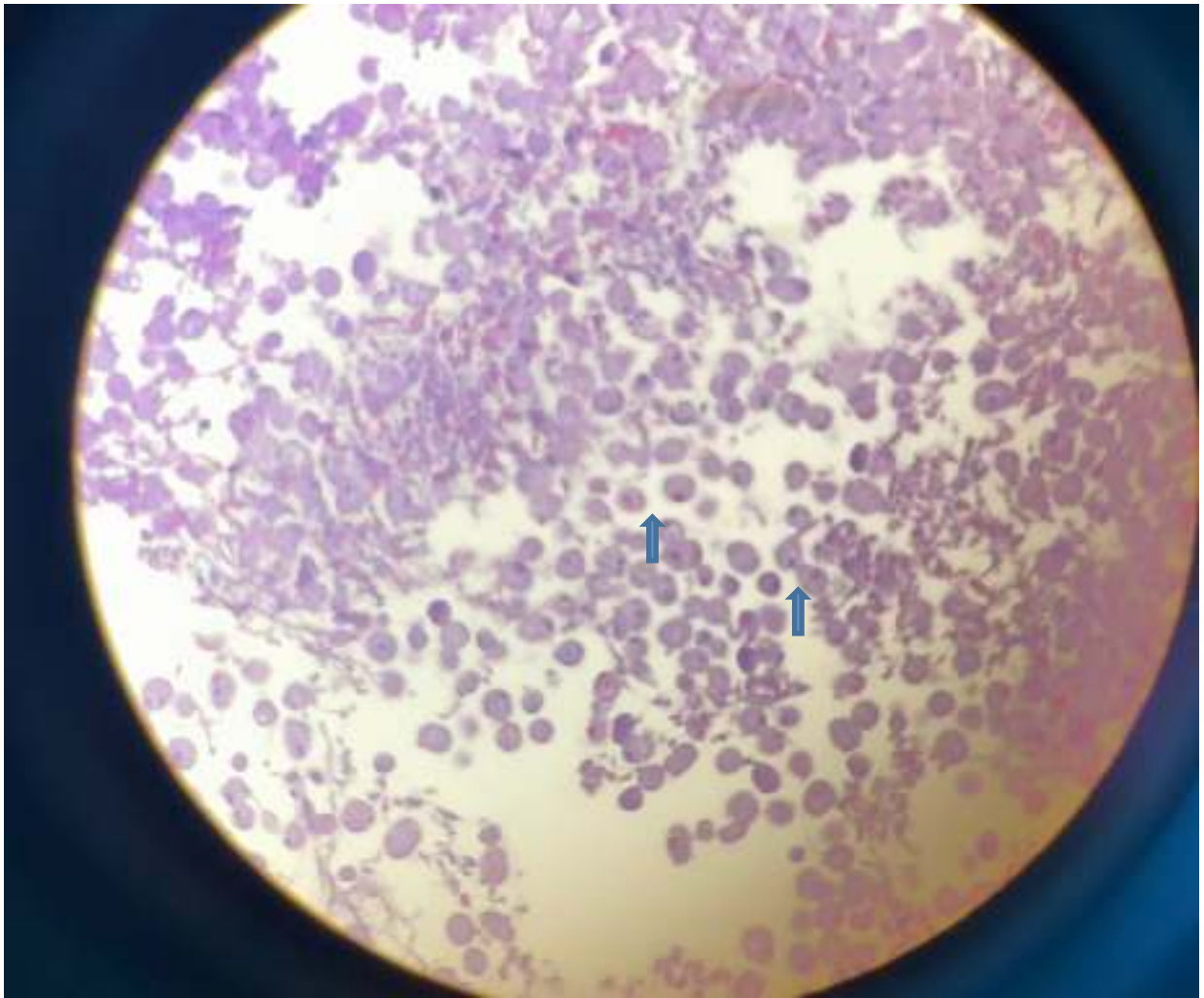
Gaita tetkikleri

- Mikroskopi: Lökosit yok, eritrosit yok, protozoon kist ve trofozoitleri, helmint ve yumurtaları görülmedi.
- Kültür: üreme olmadı.
- *E. histolytica* antijeni: negatif
- *Clostridium difficile* toksin A/B: negatif
- Gaitada gizli kan: negatif

Kolonoskopi patoloji raporu:

- Çıkan kolondan itibaren rektuma kadar alınan tüm örneklerde eozinofil lökositlerin baskın olduğu **pankolit** tablosu görülmektedir. Çekumdan alınan örneğin tamamında ***Entamoeba histolytica*** ile uyumlu organizmalar ve mikst tipte inflamasyon rejeneratif atipi bulguları içeren kript yapıları görülmüştür. Çıkan kolon kayıtlı örneklerde benzer organizmalar saptanmıştır. Bulgular **amebik pankolit** ile uyumludur. Fakat rektumdan alınan örneklerde kript distorsiyonu, bazal plazmasitoz gibi bulgular da eşlik etmektedir. Bu nedenle eşlik edebilecek inflamatuvar bağırsak hastalığı (**ülseratif kolit**) dışlanamamıştır.

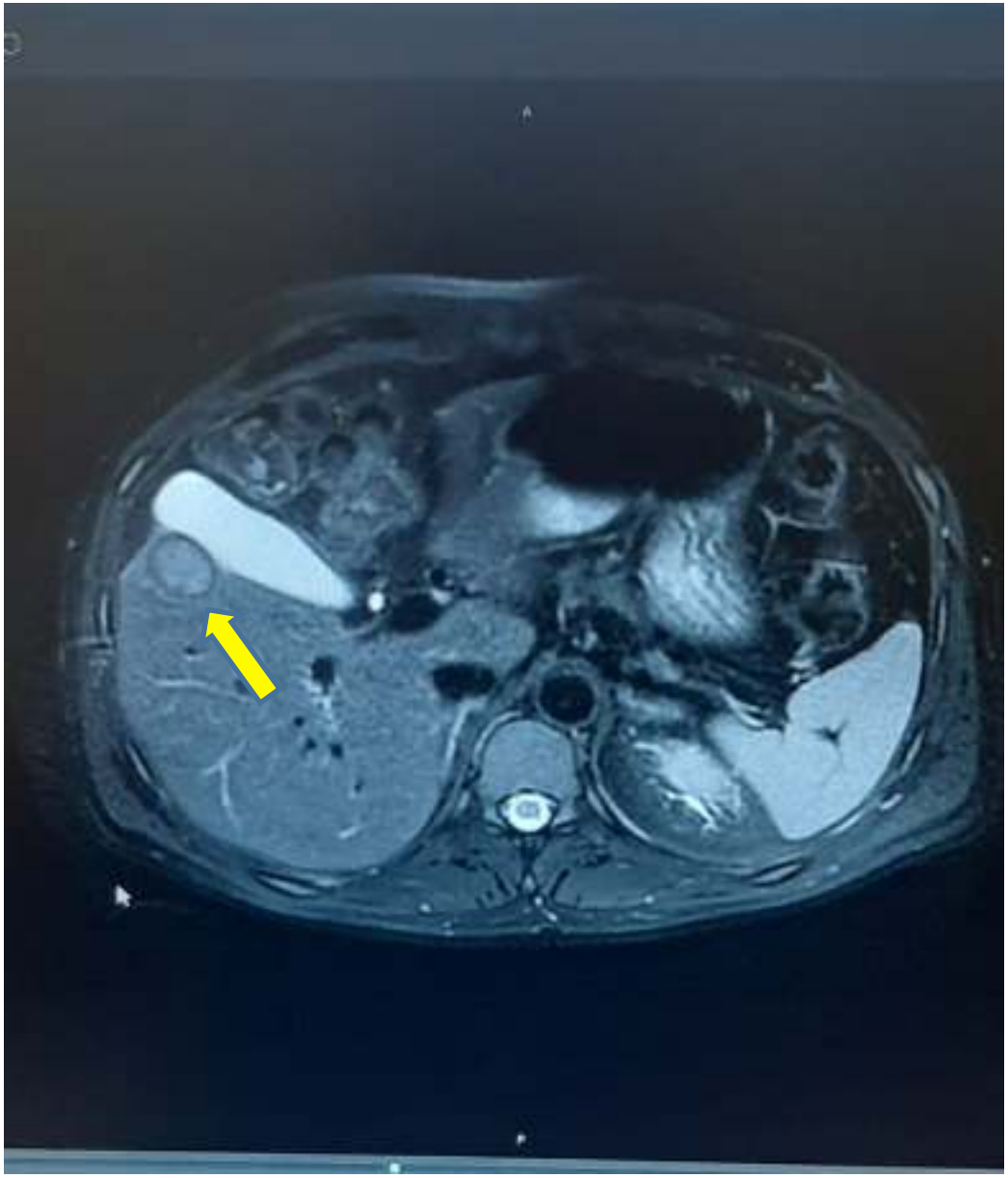
- Patoloji ile tekrar konsültasyon: Kolon biyopsi preperatlarında trofozoitlerin net şekilde görüldüğü belirtildi.



Amebik pankolit?
Ülseratif kolit?
İntrakraniyal apse?

- Tedavi:

  TDF/FTC + DTG + Seftriakson 2x2 gr + Metronidazol 4x500 mg + Mesalazin 2x4 tb + Mesalazin lavman 1x1



Karaciğer segment 5'de safra kesesi komşuluğunda yaklaşık **24x23 mm** boyutlarında **ön planda apse**

Sol glutel bölge kas planları içerisinde **38x21 mm boyutlarında, 10 cm'lik segmentte enfekte süreç**

Yatış 6. gün

- Sağ paryetal kraniotomi ile örnekleme/drenaj
- 5 gün deksametazon 4x4 mg verildi.

- Apse Gram boyama: lökosit ve mikroorganizma görülmedi.
- Apse kültürü: üreme olmadı.
- ARB negatif saptandı.

Yatış 8. gün

- Seftriakson + Metronidazol
- Genel durumu iyi, vital bulguları stabil
- Lab: WBC: 18.4 10^3/uL
  CRP: 20 mg/dL ⇓
  CK: 155 U/L ⇓

***E. histolytica* IgG IHA 1/2048 pozitif**

Yatış 12. gün

Karaciğer apse örneklemesi:

- Mikroskopik incelemede lökosit ve mikroorganizma görülmedi, kültürde üreme olmadı, ARB negatif, Tüberküloz PCR negatif

İntrakraniyal apse patoloji raporu:

- Yaygın nekroz ve vasküler proliferasyon gösteren glial doku
- Nekroz alanında histiyosit benzeri dejenere trofozoit ?

Karaciğer biyopsisi patoloji raporu:

- Nekrobiyotik materyal, histiyositler, lenfositler, nekrobiyoz

- İnvaziv amibiyazis düşünülen hastada Seftriakson tedavisi kesilerek Metronidazol 4x500 mg ile devam edildi.

- Gastroenteroloji konsültasyonu: Mesalazin tedavisine devam, poliklinik kontrolü önerildi.

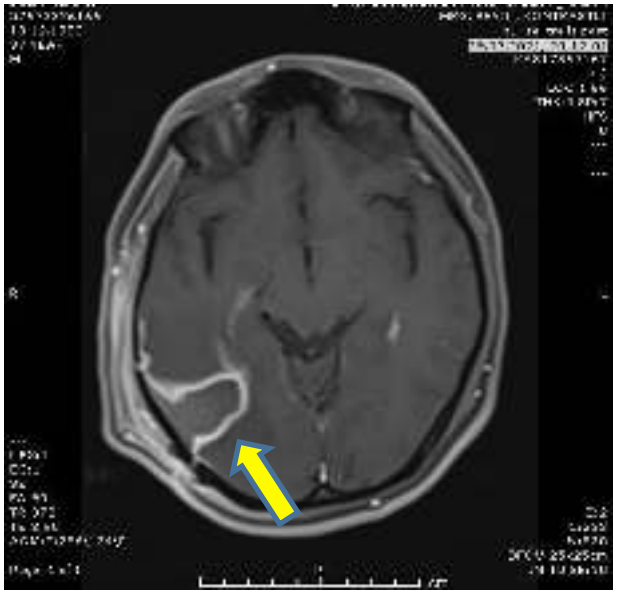
- Yatışının 2. haftasında genel durumu iyi, aktif şikayeti olmayan hasta ayaktan takip edilmek üzere taburcu edildi.

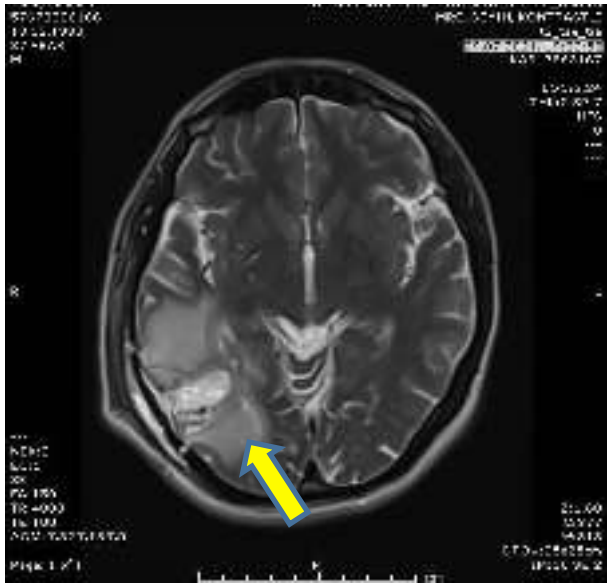
ART 19. ay ayaktan takip

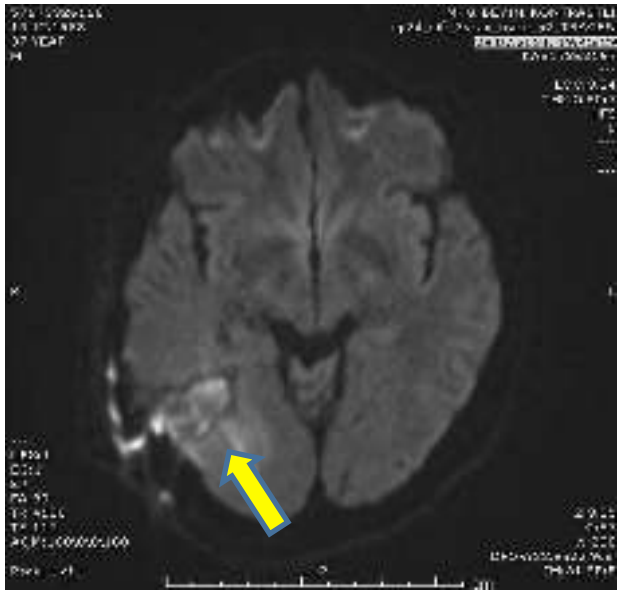
- Genel durumu iyi, aktif şikayeti yok
- Metronidazol tedavisinin 6. haftası

- Lökositozda gerileme
- Hb düzeyinde artış

ART 19. ay – Metronidazol 6. hafta





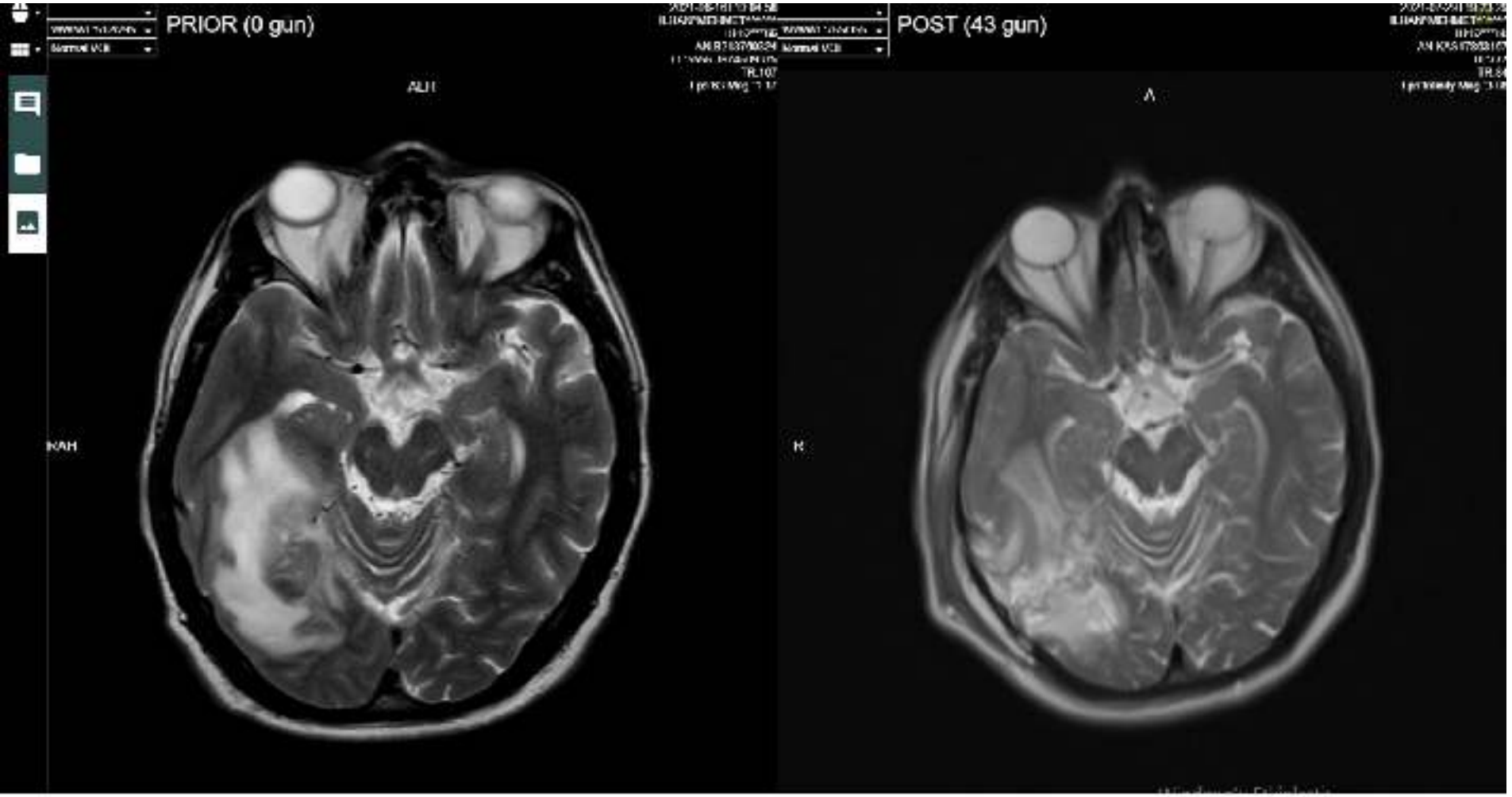


Kraniyal MRG:

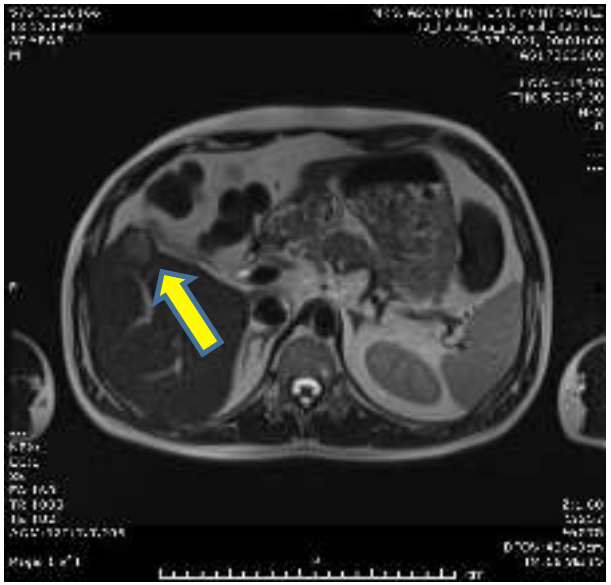
- sağ oksipital lobda **33x15 mm** boyutunda **çevresel vazojenik ödemi** izlenen, IVKM sonrası cidarsal kontrast tutulumu gösteren postop **yoğun içerikli/hemoraji lokülasyon**, bu düzeyde durada kalınlaşma ve kontrast tutulumu izlendi.

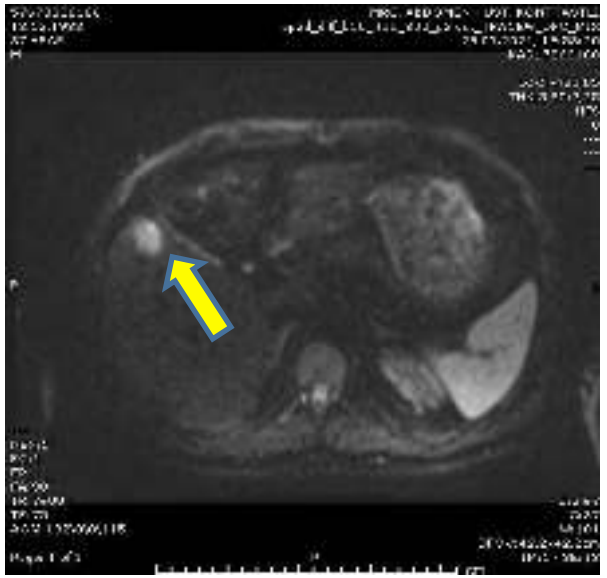
Tedavi öncesi

Tedavi 6. hafta



26 Temmuz 2021-poliklinik kontrolü

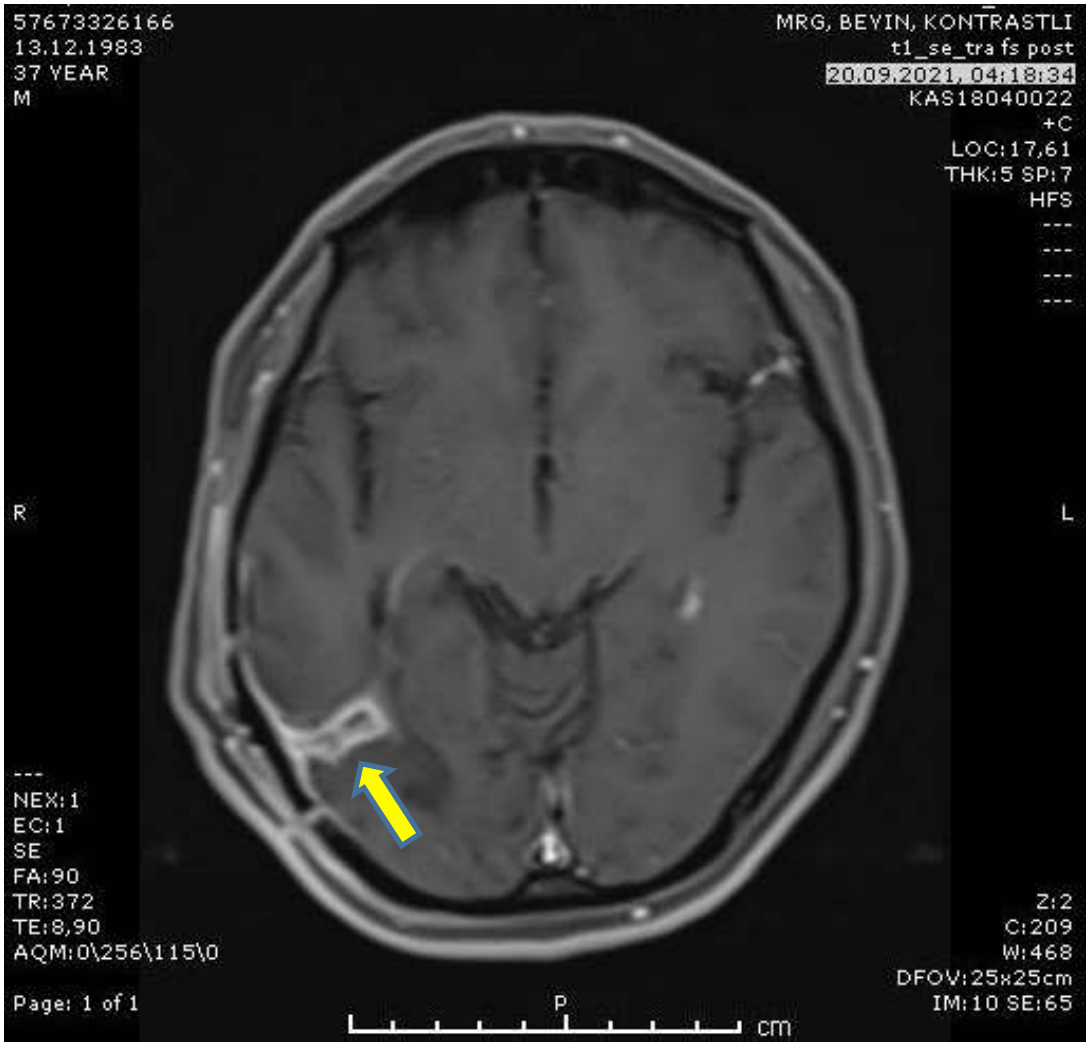




Abdominal MRG: Karaciğer segment 5'te **23 mm** çapında, düzgün sınırlı, **yoğun içerikli kistik lezyon**

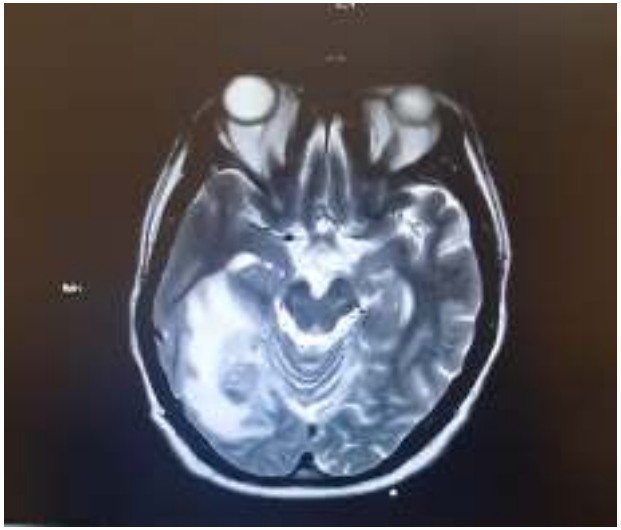
Kas yapıları olağan

Tedavi 12. hafta



- **22x9,5 mm** boyutunda periferal kontrast tutulumu gösteren lezyon
- **lezyon boyutunda belirgin regresyon**
- **subdural hemoraji güncel incelemede saptanmadı**

Tedavi öncesi



38x25 mm

Tedavi 6. hafta

33x15 mm

Tedavi 12.hafta

22x9.5 mm

Table 3. Comparison of Laboratory Diagnostic Tests for Amebiasis

Method	Sensitivity, % [Reference]	Specificity, % [Reference]	Advantages	Disadvantages
Microscopy	<60% [4]	-	Widely available	Poor sensitivity and specificity; cannot differentiate from other *Entamoeba* spp.
			Screens for other parasites	Multiple stools need to be submitted
			Minimal equipment and reagents required	Skilled observer required; time-consuming
Serology	65%–92% [16]	>90% [16]	High sensitivity and specificity, useful adjunct to stool studies	Serology remains positive for years after resolution of infection, so less helpful in endemic areas; more useful in travelers
			Rapid turnaround	Antibody response is often detectable by the time of presentation but may need to be repeated in 7–10 days if initially negative
Stool antigen detection	0%–88% [42]	>80% [42]	May have high sensitivity in endemic areas but reduced sensitivity in nonendemic areas	Poor sensitivity for amebic liver abscess
			Simple to perform, rapid turnaround time, and commercially available combined tests exist to detect several enteroparasites	Requires fresh, not fixative preserved stool for analysis
PCR	92%–100% [42]	89%–100% [42]	Gold standard; high sensitivity and specificity for colitis and liver abscess with increasing availability	More expensive; cost may limit use in resource-limited settings
			Rapid turnaround; automated systems reduce technician time and risk of contamination	Requires analysis instruments, kits, and skilled technician
			Can be combined with multiplex panels to detect multiple enteric pathogens at a time	

Abbreviation: PCR, polymerase chain reaction.

Debbie-Ann T. Shirley, Laura Farr, Koji Watanabe, Shannon Moonah. A Review of the Global Burden, New Diagnostics, and Current Therapeutics for Amebiasis. Open Forum Infect Dis. 2018 Jul;5(7):161.

Table 4. Antiparasitic Therapy for *Entamoeba histolytica* Infection

	Drug of Choice	Daily Dose	Duration, d	Alternatives
Tissue-active agent				
Amebic colitis[a]	Metronidazole or	750 mg po TID (35–50 mg/kg/d divided TID)	5–10	Nitazoxanide[b]
	Tinidazole	2 g po once daily (50 mg/kg once daily)	3–5	
Amebic liver abscess and disseminated amebic disease[a]	Metronidazole or	750 mg po TID (35–50 mg/kg/d divided TID)	10	–
	Tinidazole	2 g po once daily (50 mg/kg once daily)	5	
Luminal agent				
Asymptomatic carriage or following tissue-active agent	Paromomycin	25–35 mg/kg/d by mouth divided TID	7	Iodoquinol/diiodohydroxyquin diloxanide furoate[c]

Abbreviations: BID, twice daily; IV, intravenous; po, by mouth; TID, three times daily.

[a]Severe disease or unable to tolerate oral therapy, use metronidazole 1500 mg IV divided TID (75–30 mg/kg/d divided TID) [46].

[b]Limited data, 500 mg po BID (≥12 years), 200 mg BID (age 4–11 years), or 100 mg BID (age 1–3 years) for 3 days.

[c]Iodoquinol 650 mg po TID (30–40 mg/kg/d po divided TID for children) for 20 days after meals (optic neuritis and peripheral neuropathy have been reported), diloxanide furoate 500 mg po TID (20 mg/kg/d po divided TID for children) for 10 days [57].

Debbie-Ann T. Shirley, Laura Farr, Koji Watanabe, Shannon Moonah. A Review of the Global Burden, New Diagnostics, and Current Therapeutics for Amebiasis. Open Forum Infect Dis. 2018 Jul;5(7):161.

Increased Risk for *Entamoeba histolytica* Infection and Invasive Amebiasis in HIV Seropositive Men Who Have Sex with Men in Taiwan

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Abstract

Background: Incidence of *Entamoeba histolytica* infection and clinical manifestations and treatment response of invasive amebiasis (IA) in HIV-infected patients have rarely been investigated before.

Methodology/Principal Findings: At the National Taiwan University Hospital, medical records of HIV-infected patients who received a diagnosis of IA between 1994 and 2005 were reviewed. The incidence of amebiasis was investigated in serial blood and stool samples from 670 and 264 HIV-infected patients, respectively, using serological and specific amebic antigen assays. DNA extracted from stool samples containing *E. histolytica* were analyzed by PCR, sequenced, and compared. Sixty-four (5.8%) of 1,109 HIV-infected patients had 67 episodes of IA, and 89.1% of them were men having sex with men (MSM). The CD4 count at diagnosis of IA was significantly higher than that of the whole cohort (215 cells/μL vs. 96 cells/μL). Forty episodes (59.7%) were liver abscesses, 52 (77.6%) colitis, and 25 (37.3%) both liver abscesses and colitis. Fever resolved after 3.5 days of metronidazole therapy (range, 1–11 days). None of the patients died. The incidence of *E. histolytica* infection in MSM was higher than that in other risk groups assessed by serological assays (1.99 per 100 person-years [PY] vs. 0 per 100 PY; $p<0.0001$) and amebic antigen assays (3.16 per 100 PY vs. 0.68 per 100 PY; $p=0.12$). In multiple logistic regression analysis, only MSM was significantly associated with acquisition of *E. histolytica* infection (adjusted odds ratio, 14.809; $p=0.01$). Clustering of *E. histolytica* isolates by sequencing analyses from geographically-unrelated patients suggested person-to-person transmission.

Conclusions/Significance: HIV-infected MSM were at significantly higher risk of amebiasis than patients from other risk groups. Despite immunosuppression, amebic liver abscesses and colitis responded favorably to treatment.

Is the Evaluation of *Entamoeba Histolytica* Infection in HIV-Positive Patients of any Clinical Significance?

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Received: 19 May 2013; Received in revised form: 30 Mar. 2014; Accepted: 17 May 2014

Abstract- *Amoebiasis* caused by *Entamoeba histolytica* (*E. histolytica*) is one of the most problematic parasitic infections worldwide. Data regarding the effect of HIV-induced immunodeficiency on the status of *E. histolytica* infection are sparse in Iran. This study aimed to assess the seroprevalence of anti-*E. histolytica* IgG among Iranian HIV patients. Further, it determined whether the advancement of immunodeficiency accompanies an increased risk of *amoebiasis*. A total of 91 HIV-infected patients and 91 controls were enrolled in this case-control study. Controls were matched to cases with respect to age, gender, and where

- İran'da 91 HIV infekte hasta ile 91 kontrol hasta
- HIV ile yaşayan kişilerde IgG pozitiflik oranı daha yüksek
- Hastalık evresi açısından fark yok

comparing healthy controls (30.8% *vs.* 0% $P<0.001$). There was no statistical difference in the serology of *E. histolytica* among AIDS stage and non-AIDS HIV patients. This study demonstrated that HIV is significantly associated with higher prevalence of *E. histolytica* infection. Early evaluation and treatment of *E. histolytica* in this population is recommended to prevent and control this infection.

Severe amoebic colitis in an HIV-infected male patient

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Accepted 10 December 2016

DESCRIPTION

A previously healthy Japanese man aged 67 years was admitted into our hospital after presenting with fever, abdominal pain and watery diarrhoea (occasionally bloody) for 2 weeks. At presentation, he had a fever of 38.9°C and diffuse abdominal tenderness. His white cell count was 7440/μL, C reactive protein 22.18 mg/dL, serum albumin 1.8 g/dL, potassium 2.9 mmol/L and blood urea nitrogen was 26.5 mg/dL. Abdominal CT revealed pancolitis with trophozoites (figure 2, arrows). Microscopic examination of the patient's stool also confirmed the presence of *Entamoeba histolytica* trophozoites and amoebic serology was positive, confirming the diagnosis of severe amoebic colitis. Clinical symptoms improved remarkably after a 2-week course of metronidazole and he was discharged 3 weeks after admission. Follow-up colonoscopy after 6 months revealed multiple ulcer scars throughout the entire colon (figure 1B). The patient was also screened and

【 CASE REPORT 】

An HIV-infected Patient with Confirmed Overlapping Complications of Severe Amebic Colitis and CMV Enteritis

Hiromu Morikubo[1], Daisuke Saito[1], Miki Miura[1], Taro Sato[1], Shintaro Minowa[1], Osamu Ikezaki[1], Tatsuya Mitsui[1], Akihito Sakuraba[1], Mari Hayashida[1], Masachika Fujiwara[2], Kengo Tokunaga[1], Junji Shibahara[2], Hideaki Mori[1], Tadahiko Masaki[3], Shin Kawai[4] and Tadakazu Hisamatsu[1]

Parasitol Res (2012) 110:1291–1296
DOI 10.1007/s00436-011-2617-8

SHORT COMMUNICATION

Clinical case of cerebral amebiasis caused by *E. histolytica*

Cinthya A. Maldonado-Barrera · Maria del Rosario Campos-Esparza · Luis Muñoz-Fernández · Joaquin A. Victoria-Hernández · Rafael Campos-Rodríguez · Patricia Talamás-Rohana · Javier Ventura-Juárez

- 55 yaşında erkek, beyin apsesi saptanarak opere edilmiş ancak etyoloji belirlenememiş
- 2 ay sonra tekrar başvurmuş, astrosit beyin tümörü tanısı almış
- 10 ay sonra hasta kaybedilmiş
- Geriye dönük olarak hastanın ilk preperatları bir dizi immünhistokimyasal yöntemlerle incelenerek tanı konmuş

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.

Brain Abscess due to Entamoeba histolytica

C Sundaram[*], BCM Prasad[**], G Bhaskar[*], V Lakshmi[*], JMK Murthy[**]

[*]Departments of Pathology, Radiology, Microbiology, Nizam's Instiute of Medical Sciences, Hyderabad. [**]Departments of Neurology and Neurosurgery, Institute of Neurological Sciences, Care Hospital, Hyderabad. *Received : 30.1.2003; Revised : 22.7.2003; Accepted : 5.2.2004*

Brain Abscess due to Infection with *Entamoeba Histolytica*

Kenji Ohnishi, Misako Murata, Hirooki Kojima, Nobuhiko Takemura, Tomio Tsuchida, and Hiroshi Tachibana

Departments of Infectious Diseases and Neurosurgery, Tokyo Metropolitan Bokutoh General Hospital, Department of Infectious Diseases, Tokai University School of Medicine, Tokyo, Japan

View Less —

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Metastatic amebic brain abscess: A rare presentation

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[Probable amebic brain abscess in a homosexual man with an Entamoeba histolytica liver abscess]

[Article in Japanese]

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A 51-year-old Japanese-Brazilian homosexual man was admitted to a hospital because of fever, headache and right epigastralgia. He had been homosexual for 20 years. An abdominal CT revealed a liver abscess and microscopic examination of the pus of the drainage revealed cystic forms of Entamoeba histolytica. Oral administration of metronidazole 2,250 mg/day was started for amebic liver abscess. He complained of severe throbbing headache, and magnetic resonance imaging (MRI) of the brain showed a brain mass of approximately 2 cm in diameter in the right parietooccipital lobe. An amebic brain abscess was suspected and he was transferred to our hospital. Continuous oral administration of metronidazole for 49 days instead of invasive procedures gradually improved headache, fever and right epigastralgia. On the follow-up MRIs, the brain mass was gradually encapsulated, reduced its size, and finally disappeared. A diagnosis of amebic brain abscess was made on the basis of coexistent amebic liver abscess, MRI findings and a dramatic effectiveness to metronidazole. One should pay attention to E. Histolytica infection in the differential diagnosis of the abscess of the liver and brain since it has been increasing in Japan in recent years.


Teşekkür ederim