# Mollaret's meningitis: a case report

Ünsal ÖZGEN\*, M.D., Ayşe BALAT\*, M.D., Sabit ŞAHİN\*, M.D., Hamza KARABİBER\*, M.D., Mehmet TURGUT\*, M.D., Emine SÖNMEZ\*\*, M.D., Kaya SARAÇ\*\*, M.D., Turan ASLAN\*\*\*, M.D.

Mollaret's meningitis is a rare clinical entity characterized by sudden onset of meningeal irritation attacks. In almost all cases, an etiological agent-could not be demonstrated and there is no specific therapy for the disease. In this report, an 11 year old girl who had meningitis attack for 9 times in the last 5 years is presented. [Journal of Turgut Özal Medical Center 1(2):154-155,1994]

Key Words: Child, Mollaret's meningitis, recurrent aseptic meningitis

## Mollaret menenjiti: vaka takdimi

Mollaret menenjiti,ani başlayan meningeal irritasyon atakları ile karakterize nadir bir hastalıktır. Vakaların hemen tümünde etyolojik bir ajan gösterilemez ve spesifik bir tedavisi yoktur.Bu makalede beş yıl içerisinde 9 kez menenjit atağı geçiren 11 yaşındaki bir kız hasta takdim edilmiştir.[Turgut Özal Tıp Merkezi Dergisi 1(2):154-155,1994]

Anahtar Kelimeler: Cocuk, Mollaret menenjiti, rekürren aseptik menenjit

Mollaret's meningitis, first described by Mollaret in 1944, is a rare clinical entity which is characterized by sudden onset of meningeal irritation attacks<sup>1-1</sup>, presentation of Mollaret's cells in CSF in the first 24 hours<sup>5.6</sup>, and relieving spontaneously and without any neurological sequele<sup>1,2,5,6</sup>. Previously, less than 60 cases have been reported by the authors from different countries in the world. To our knowledge this case report is the first report from Türkiye.

#### **CASE**

An 11-year-old girl was presented with vomiting in the last 12 hours and headache on October 10,1993. Initial physical examination revealed nuchal rigidity, positive Kernig's and Brudzinsky's signs and no other remarkable sign. WBC count was 29500/mm3 and ESR was 50 mm in one hour. Other routine laboratory studies including fibrinogen, urine analysis, serum immunglobuline G, A, M levels and lung, Town, Schuller's, Water's roentgenograms and cranial CT were all normal. Blood, urine and

CSF were cultured. All bacterial and fungal cultures were negative. HSV-1, HSV-2 and EBV antibodies were negative both in serum and CSF. In CSF 5000 polymorphonuclear leukocytes/ mm³ and 480 lymphocytes/mm³ were counted, protein was 103 mg/dl, glucose 23 mg/dl, CL 117 mEq/L, and simultaneously obtained serum glucose level was 123 mg/dl. Previous CSF findings of the patient is shown in Table I.

In her medical history, she had been treated due to aseptic meningitis diagnosis in various clinics on Dec 11, 1988, Mar 8, 1989, Dec 12, 1990 and Aug 1991. On Apr 20, 1992, Jun 4, 1992, May 12, 1993, and Sept. 17, 1993 she was hospitalized in our clinic with the same complaints and clinical findings. No etiological agent was demonstrated during these attacks. In 24 to 72 hours after onset clinical findings and CSF content became normal. During the attacks nothing but crystallized penicillin and chloramphenicol were administered till cultures results were reported. The patient was completely normal between the episodes.

<sup>\* :</sup> İnönü University School of Medicine Pediatri Department - Malatya

<sup>\*\* :</sup> İnönü University School of Medicine Radiodiagnostic Department - Malatya

<sup>\*\*\* :</sup> İnönü University School of Medicine Infectious Disease Department - Malatya

Table I. CSF findings of the patient in the previous 4 attacks

Date	PNL/L * in CSF	Protein content in CSF(mg/dl)	Glucose ratio (CSF/Serum)(mg/dl)	CL in (CSF/Serum) (mEq/L)	WBC ** ( mm³ )
Apr 20,1992	3300/0	442	36/100	125	34200
Jun 4,1992	3000/300	83	68/115	118	37700
May 12,1993	490/0	103	79/122	123	26100
Sep 17,1993	610/30	55	42/90	125	24000

Polymorphonuclear leukocytes/lymphocytes

### **DISCUSSION**

Mollaret's meningitis is a rare entity, accounting for less than 0.1% of all aseptic meningitis. It can be clinically confused with other recurrent meningitis, especially with aseptic meningitis.

Bruyn<sup>5,7</sup> proposed following criteria to achieve an accurate diagnosis; (1) recurrent attacks of fever associated with signs and symptoms of meningeal irritation, (2) the attacks are separated by symptomfree intervals lasting for weeks and months, (3) during the attacks, there is CSF pleocytosis of a mixed type, including leukocytes and lymphocytes, (4) the disease is followed by remission without residual signs, (5) no causative organism can be detected. According to him these criteria are enough for diagnosis. On the other side Galdi<sup>5</sup> modified criteria as follows; (1) fever may or may not be present, (2) approximately 50 % of the patients will have transitory neurologic symptoms in addition to those of meningeal irritation, (3) the symptom free intervals may vary from days to years, (4) there may be increased gamma-globulin fraction in the CSF. In these cases viral causes can be demonstrated<sup>8,9</sup>, but exact etiological agents are not known in all cases 1,2,4,5. In the present case, an etiological agent was not demonstrated. According to the clinical features and course it was diagnosed as Mollaret's meningitis.

Although various pharmacological agents are found to be effective in some patients, there is no spesific therapy and it relieves spontaneously without any sequele<sup>2,3,5</sup>. A review of the literature revealed that about 60 cases of mollaret's meningitis have

been reported previously, and most of them were published from various countries. The present case report is the first reported case from Türkiye.

#### REFERENCES

- 1. Stoppe G, Stark E, Patzold V. Mollaret's meningitis: CSF-immunocytological examinations. J Neurol 1987; 234: 103-6.
- 2. Graman PS. Mollaret's meningitis associated with acute Ebstein-Barr virus mononucleosis. Arch Neurol 1987; 44: 204-5.
- 3. Galdi AP. Benign recurrent aseptic meningitis (Mollaret's meningitis). Case report and clinical review. Arch Neurol 1979; 36: 657-8.
- 4. Bamborschke S, Sandmann J, Wullen T. Mollaret's benign recurrent aseptic meningitis. Case report, result of cerebrospinal fluid cytology and review of the literature. Nervenartzt 1990; 61: 615-9.
- 5. Mascia RA, Smith CW. Mollaret's meningitis: An unusual disease with a characteristic presentation. Am J Med Sci 1984; 287: 52-3.
- 6. Achard JM, Duverlie G, Schmit JG, Lebon P, Veyssier P, Fournier A. Mollaret's maningitis and Herpes simplex virus type I. New Eng J Med 1992; 326; 893-4.
- 7. Taylor RKN, Rayner BL. Benign recurrent aseptic meningitis (Mollaret's meningitis). South Afr Med J 1983; 63: 741-2.
- 8. Berger JR. Benign aseptic (Mollaret's) meningitis after genital herpes. Lancet 1991;337:1360.
- 9. Bergstrom T. Is Mollaret's meningitis caused by Herpes simplex virus type 2?. Lakartidningen 1989; 86: 1279-80.

Correspondence: Ünsal ÖZGEN, M.D İnönü University School of Medicine Pediatri Department 44300 MALATYA

<sup>\*\* :</sup>In peripheral blood