Familial Mediterranean fever; diagnosis, treatment, and complications
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**Implication for health policy/practice/research/medical education:**
Mediterranean fever is an autosomal recessive disease. Its features are intermittent attacks of painful inflammation, abdominal pain, fever, and arthritis. Its attacks take from a few hours to a few days of symptoms and the recurrence takes a few weeks or months.

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**Introduction**
Mediterranean fever is an autosomal recessive disease. Its features are intermittent attacks of painful inflammation, abdominal pain, fever, and arthritis. Full identification of the disease has been possible in the last 50 years. It is seen in Turkish, Armenian, Jewish (Arabs, Ashkenazi) and Mediterranean region ethnics. Its attacks take from a few hours to a few days of symptoms and the recurrence takes a few weeks or months. Salehzadeh and colleagues reported the first comprehensive Mediterranean fever patient in Ardabil region (1).

**Diagnosis**
The diagnosis of Familial Mediterranean fever (FMF) is based on Tel-Hashomer clinical criteria, which is two or more major symptoms or one major plus two minor symptom. Major and minor Tel-Hashomer clinical criteria are presented in **Table 1** (2).
Livneh et al. suggested that the diagnostic criteria includes typical, incomplete, and supportive. A simplified version of it is given in **Table 2** (3).
The requirements for the diagnosis of FMF have been defined as the presence of: at least one major; or at least two minor criteria. Typical attacks must include all the following: recurrent (at least three episodes), febrile (rectal temperature ≥ 38 °C) and short in duration (12 hours to 3 days). Incomplete attacks (must be recurrent) are defined as differing from typical attacks in one or two features as follows: 1) temperature <38 °C, 2) attack duration longer or shorter than a typical attack (but no less than six hours and no more than seven days), 3) no signs of peritonitis during the attacks, 4) localized abdominal attacks, and finally 5) arthritis in a location other than the hip, knee or ankle.

**Treatment**
Targeted therapy to treat acute attacks, prevent relapses and is suppressed by chronic inflammation and prevent complications. Unfortunately, the exact evaluation of treatment response, such as systemic lupus erythematosus, is not available. Mediterranean fever can be diagnosed wrongly with many organic and non-organic diseases. Also a high incidence of psychosomatic and fibromyalgia disease can make diagnosis and treatment more and more difficult.

Colchicine has been well-known since 1970 that uses its impact with 1 mg per day, if it does not respond to treatment it can be raised to 1.5 to 2 mg/day, and it can be administered twice a day if is not tolerated as a single

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Studies of resistance to colchicine have been reported in 5% to 10% (7-9). Hence, if a patient is being treated with colchicine, other circumstances should be considered too, especially if the patient, has previously received treatment for other diseases. Using 40 mg of intravenous methylprednisolone (10) in acute phase, alpha interferon, IL-1 cytokine antagonist (11), IL1 alpha and IL-1 beta blocker (12,13), anti TNF (14) and dapsone (15) is reported to be effective.

Complications

Amyloidosis is the most common complication of FMF (16), and it determines whether the prognosis of the disease is associated with progression to end-stage renal disease (10-16). Colchicine prevents the occurrence of amyloidosis, to stop amyloidosis, and even regress it. The duration of the disease is not the main cause of amyloidosis but specific genetic and environmental conditions is necessary. Prevalence of amyloidosis in Armenians is 24% but about those Armenians living in California no amyloidosis has been reported (17). Homozygote of M694V is mostly observed in Amyloidosis patients (18). End-stage renal disease and nephrotic syndrome is the most common finding in amyloidosis. Mediterranean fever patients need to be evaluated against proteinuria regularly (15-18). Some studies on fat skin biopsy for amyloidosis have low sensitivity in evaluations (19-21). We have shown that the beneath fat pad skin biopsy is valuable and reduces the need for renal biopsy (Figure 1) (22).

Author's Contribution

BB was the single author of the paper.

Conflict of interests

None to declare.
Ethical considerations
Ethical issues (including plagiarism, misconduct, data fabrication, falsification, double publication or submission, redundancy) have been completely observed by the author.

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