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Case Report: Pulmoner tuberculosis caused by immunosuppressive treatment

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Immunosuppressive treatment is used in many clinical conditions. Among these are autoimmune diseases such as ankylosing spondylitis, rheumatoid arthritis, sarcoidosis, Behçet's disease, and multiple sclerosis, organ transplantation and some inflammatory diseases, which are not autoimmune.

Agents used for immunosuppressive purposes have been classified into five groups, i.e. glucorticoids, cytostatics, antibodies, drugs acting on immunophilins, and other drugs such as interferon . These drugs help to suppress immune system which functions excessively or optimum level, while creating some risks as well. The most important of these risks is the disappearance of defence against infectious agents and emergence of undue infections. Therefore, during immunosuppressive treatment, prophylactic anti-infective agents may be required.

Our male patient at the age of 47 has been on immunosuppressive treatment for twenty years with the diagnosis of ankylosing spondylitis. Since analgesic anti inflammatory drugs and glucocorticids did not resolve the symptoms , it was decided on September 2012 that TNF-alfa antagonist monoclonal antibody should be initiated. Patient was evaluated for tuberculosis (TB) before immune suppression and when Tuberculin Skin Test (TST) result was found to be 6mm, it was recommended that patient should use prophylactic Isoniazid 300 mg/day for 9 months. At first month control visit, no side effects of Isoniazid were observed. After one month, patients discontinued Isoniazid as it induced his appetite too much and did not share this information with his physician. In 2013 March, he referred again with the complaints of cough, loss of weight, and fatique, which continued for a month without resolution. With chest Xray graphy and sputum smear examination, patient was diagnosed to have smear positive pulmoner TB. Four drug anti-TB treatment comprising Isoniazid , Rifampicin, Ethambutol and Pyrazinamide was initiated. Drug susceptibility testing yielded that the patients microbic agent was sensitive to all TB drugs. After four drug treatment for two months, it was decided to maintain Isoniazid and rifampicin treatment until the completion of immunosuppressive treatment.

Discussion: Before initiating immunosuppressive treatment, strategy should be developed against common infectious diseases in the community. Especiallly before the use of agents impairing cellular immunity such as TNF-Alpha antagonists , subject should be evaluated for tuberculosis and chemoprophylaxis administered if necessary . TST may yield false negative results due to previously used immunosupressive drugs like glucocorticoids . That's why the decision of chemoprophylaxis is both difficult and important.

Conslusion: Patients considered for immun suppressive treatment should be protected against opportunistic infections. Informing patients adequately on chemoprophylaxis will prevent adverse outcomes.

Biography

C. Oztug Onal graduated from Gazi University Medical Faculty and completed his Ph.D at the age of 33 years from Department of Immunology at the same university. He worked at the Refik Saydam National Health Agency for 8 years. From 2012 to present he is working at 4th Tuberculosis Dispensary/Ankara.

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