

AB011. A review of dermatomyositis induced by drugs

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Background: Drug-induced dermatomyositis (DM) is a well-known adverse reaction of hydroxyurea, but its association with non-hydroxyurea drugs is largely unknown.

Methods: The English, French and Spanish-language literature from the PubMed database was reviewed through August 31, 2018. The search strategy included “Dermatomyositis” and “Drug Eruptions” as Medical Subject Headings (MeSH) and reports of new DM onset attributed to a drug were identified. Additional articles were added by searching the bibliographies of gathered reports.

Results: Of the 89 reported cases, 51% were females and the median age was 54 years. A total of twenty-six unique drugs were identified, prescribed for a variety of conditions including autoimmune disorders (13.2%), cardiovascular diseases (14.6%), and malignancies (51.6%). The latency period between initiation of the drug and DM onset ranged from 3 days to 11 years. The most common reported

offending drug was hydroxyurea (52%), none of which had any clinical or laboratory evidence of myositis. However, thirty-three cases (78.5%) of non-hydroxyurea-induced DM presented with proximal muscle weakness. DM associated myositis was confirmed by showing elevation of muscle-derived enzymes alone (76.2%), or in combination with classic muscle biopsy findings (45.4%). In addition, while antinuclear antibody (ANA) was only weakly positive a single case of hydroxyurea, 21 cases of non-hydroxyurea induced DM had a positive ANA (50%).

Conclusions: It is difficult to implicate a particular drug as a definite cause of DM, especially as most of the patients have underlying autoimmune conditions or malignancies. However, there are convincing case reports that suggest DM may be induced or at least be unveiled by drugs. While most of the cases have been attributed to hydroxyurea, there is an increasing number of reports following treatment with non-hydroxyurea medications. These cases typically present with distinct clinicopathological features, suggesting a different immunopathogenesis.

Keywords: Dermatomyositis (DM); drug-induced

doi: 10.21037/atm.2019.AB011

Cite this abstract as: Sharifzadeh A, Rashighi M. A review of dermatomyositis induced by drugs. *Ann Transl Med* 2019;7(Suppl 4):AB011. doi: 10.21037/atm.2019.AB011