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New updates DoxyPEP: The do's and don'ts of doxycycline use

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DoxyPEP describes the use of doxycycline for prevention of certain bacterial STI infections. Doxycycline belongs to a class of antibiotics known as tetracyclines.

A recent report[1] informs users of DoxyPEP of the interactions between doxycycline and other dermatology medications. For instance, isotretinoin is a medication to treat severe acne, which may go by the brand names of Accutane Roche, Clarus, Epuris, and Absorica LD.[2] Another medication that interacts with doxycycline is acitretin, which is used to treat psoriasis and derivatives of vitamin A (retinoids) for skin care.[3] Inform your family physician and/or dermatologist if you are on doxycycline. The combined use of doxycycline and either isotretinoin or acitretin is cautioned as it can cause idiopathic intracranial hypertension (ITH) aka pseudotumor cerebri, a condition characterized by increased pressure around the brain.[1,5] This condition can cause concerns with vision, including temporary blindness, and headaches.[1,3,4] It is not fully known if intermittent use of DoxyPEP (rather than consistent daily use) with isotretinoin or acitretin will increase the risk of ITH in the same way.

With the range of potential interactions of doxycycline, it is equally important not to share or distribute DoxyPEP at sex venues and sex parties.[3] Casual sharing of prescription medication with good intentions can cause adverse side effects or interactions, and potentially risk the health of others. Healthcare providers can further help clients by discussing the risks of sharing medication and the side effects of these drugs.

In addition to the potential for interaction with prescription medication, DoxyPEP may interact with some common non-prescription medications and supplements, including antacids, iron supplements, and bismuth (e.g., Pepto Bismol).[3] Always inform your various healthcare providers of any other prescription medication(s) and over-the-counter (non-prescription) medications that you are taking.

The DOXYPEP research study[6] explored the effects of intermittent doxycycline use on gut health, gut microbiome, and antimicrobial-resistant genes (ARGs). This study found

that taking more than 25 doses of doxycycline during the six-month period resulted in higher levels of tetracycline ARGs, but it did not significantly change the gut microbiome composition. More studies are needed to learn about ARGs and DoxyPEP's impact on gut microbiome.

In summary, it is recommended to consider DoxyPEP to reduce STI infections after weighing its benefits against its potential risks. Other factors, including drug-drug interactions, need to be considered to ensure maximum benefit and minimal adverse effects.

References

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