CASE REPORT

VICKS INDUCED ADVERSE DRUG REACTIONS - RARE CASE REPORTS

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INTRODUCTION: Lunsford Richardson developed the formula in 1894¹. When he created a salve for his children after travelling to France and he named the product for his brother-in-law Dr. Joshua Vick. A Penn state study showed Vicks Vaporub to be effective in helping to reduce nasal congestion i.e seen in common cold (coryza) and thus reduce cough in both children and adults². Vicks Vaporub is an effective cough medicine for Guinea pigs³. Vicks Vaporub has also been used in the treatment of onychomycosis (fungal infection of nail)⁴. **ACTIVE INGREDIENTS:** Label reads: special vick medications (camphor, menthol, spirits of turpentine, eucalyptus oil, cedar leaf oil, thymol, myristica oil) compounded by the original vick process. Camphor (4.8%) - cough suppressant and topical analgesic. Eucalyptol (1.2%) - cough suppressant. Menthol (2.6%) - cough suppressant and topical analgesic.

INACTIVE INGREDIENTS: Cedar leaf oil, Nutmeg oil, Turpentine oil, special petrolatum.

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CASE 1: A 21yrs old male suffering from cold and cough and he was self medicated by using vicks vaporub (for the first time) before he had used zandu balm. He had applied vicks vaporub to his nose and cheeks and developed inflammatory reactions in 8-12hrs, which then progressed to maculopapular rashes (fig 1) on the applied areas. Suspecting a case of adverse drug reaction by vicks vaporub and he was advised to take Tab. Avil (Pheniramine Maleate 22.5mg) and Tab. Wysolone (Prednisolone 10mg) once a day and the very next day he was relieved by his symptoms and to be noticed is he had developed rashes even on his back as he had applied a little of vicks vaporub over his back also and could see the same kind of reaction. Patient had continued the treatment for 5 days and his signs and symptoms were relieved, with residual hyperpigmented spots (fig 2).

CASE 2: A 42yrs female suffering from cold and headache and was self medicated with vicks vaporub (previous history of allergic reaction to vicks vaporub present). She had applied vicks vaporub on her forehead and developed redness, itching and macular rashes (fig 3) in 8-10hrs, which then progressed to induration on the applied areas (fig 4). Suspecting a case of adverse drug reaction by vicks vaporub, she was advised to take Tab. Cetrizine 10mg twice daily for 2 days and then she was continued with Tab Avil (Pheniramine Maleate 22.5mg) and also local application of Beclomethasone Propionate ointment. And after 6 days of treatment redness and itching had reduced but induration persisted for 8 days.

DISCUSSION: A maculopapular rash (less than 1cm diameter) is a skin disease that is characterized by redness (erythema) and raised spotted lesions. The combined presence of macules (discolored spots on the skin that are neither raised nor depressed) and papules (tiny, solid bumps) results in

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hyperpigmentation and inflammation of the skin. This kind of rash does not contain pus. It generally erupts on the face, chest, palms, and soles and later spreads to other parts of the body. The nature of eruptions may be acute (less than 4 weeks), sub-acute, or chronic (greater than 8 weeks). Treatment of maculopapular rash is mainly treating the underlying cause associated with it along with topical steroids and antibiotics and anti-inflammatory drugs. Hyperpigmentation are caused by excess production of melanin. It can be either diffuse or focal affecting such areas of face and back of hand. Melanin is produced by the melanocytes at the lower layer of epidermis. It can be caused due to sun damage, inflammation, or other skin injuries including those related to acne vulgaris. People with darker Asian, African Mediterranean skin tones are also more prone for hyperpigmentation, especially if they have excess sun exposure. Treatment of hyperpigmentation is of skin lightening agents like hydroquinone, azelic acid, kojic acid, tretinoin (retinol), and topical glucocorticoids. Common cold (also called as rhinopharyngitis, nasopharyngitis, acute coryza, Cold) is a viral infection of the upper respiratory tract which primarily affects the nose. Symptoms include coughing, running nose, sneezing, sore throat, fever which usually resolve in 7-10 days and few symptoms lasting for upto 3 weeks. It is typically transmitted via airborne droplets (aerosols), direct contact with infected nasal secretions or by fomites (contaminated objects). Most commonly implicated virus associated with this is Rhinovirus (30-80%), which is a type of a Picornavirus⁵. Others include Coronavirus (10-15%), Influenza virus (10-15%), Adenovirus (5%)⁶, Human Parainfluenza viruses, Human Respiratory Syncytial viruses, Enterovirus other than Rhinovirus and Metapneumovirus. Now, coming to our case discussion in specific, as we all know that Vicks Vaporub is used, day in and day out as a self medication, all the active ingredients i.e. camphor, eucalyptus and menthol are skin irritants⁷ and very much notorious in causing itching and rashes in those people who are sensitive to these products.

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Fig. 1

Fig. 2

Fig. 3

Fig. 4

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