

Anticoagulants Induced Ecchymosis

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ABSTRACT

A case report of oral anticoagulant—acenocoumarol Induced Ecchymosis. Acenocoumarol is a coumarin derivative and vitamin K antagonist. Adverse effects like ecchymosis that is potentially fatal if not noticed with an altered coagulation profile. Initiation of safer anticoagulants for mid to long-term treatment under the supervision of coagulation profile.

Keywords: Anticoagulants, Acenocoumarol, Case report, Ecchymosis, Haemorrhage.

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INTRODUCTION

Definition

Ecchymosis is caused by the leaking of blood from ruptured blood vessels into the subcutaneous tissue (>1 cm) resulting in discolouration of skin (bruise) - Black, Blue or Red to Purple.

Symptoms

Bleeding beneath the skin due to trauma of any kind; bruises are typically black and blue first. The healing and age of ecchymosis depend on the skin colour change from black to fading to yellow.

Bruises are away from bony prominences; the commonest site is the head and neck (particularly the face) followed by the buttocks, trunk, and arms. Bruises are large, commonly multiple and occur in clusters.

Most commonly seen in older age groups and hyperactive children.¹

Anticoagulant-induced Ecchymosis

Acenocoumarin-induced ecchymosis is an unusual complication of oral anticoagulant therapy with high morbidity and mortality needing instant termination of the drug. Pathological states before the development of ecchymosis include disorders of coagulation pathways and platelets in addition to causing hematoma formation and disorders of dermal connective tissues.^{1,2}

Acenocoumarol

It's a coumarin derivative and vitamin K antagonist by inhibiting the reduction of vitamin K by vitamin K epoxide reductase. It is used to prevent the formation of new clots and helps to reduce the risk of thromboembolic disorders, mechanical heart valves, Rheumatic Heart Disease, Atrial Fibrillation, Myocardial Infarction and major surgeries.³

Side Effects

A main side effect of the drug is haemorrhagic complications. Bleeding can be minor gum bleed or gastrointestinal (GI) and intracranial bleeding which is fatal.

CASE DESCRIPTION

A 63-year-old male, known to have comorbidities of diabetes mellitus/coronary artery disease - s\p Percutaneous Transluminal

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Coronary Angioplasty and recent ischemic stroke, presented to the Emergency Medicine Department. He is on regular medications, including oral Aspirin 75 mg, Enalapril 2.5 mg, Atorvastatin 20 mg, Metoprolol 25 mg, OHA'S, and undergoing physiotherapy.

The patient had chief complaints of pain and swelling of the right half of the body after massaging the affected limbs at home and complaints of blackish discoloration over the right limbs and the right side of the neck for a week (Figs 1 and 2).

On examination, the patient was conscious, oriented, and afebrile with stable vitals.

The patient was recently diagnosed with an acute ischemic stroke one month ago and with evidence of LV apical clot in echocardiogram. The patient was started on oral Acenocoumarol 3 mg once a day. Coagulations profiles were done, which showed elevated PT/INR/APTT. Imaging with doppler of the affected limb showed no evidence of DVT or hematoma.



Fig. 1: Blackish discoloration over right limbs



Fig. 2: Blackish discoloration over the neck

DISCUSSION

Diagnosed as a case of anticoagulant-induced ecchymosis due to prolonged use of anticoagulants, i.e., Acenocoumarol. The patient

was initially treated with Inj. vitamin K 10 mg IM and cessation of oral Acenocoumarol, along with regular monitoring of coagulation profiles.

CONCLUSION

This case report highlights the adverse effects, i.e., ecchymosis caused by prolonged use of oral anticoagulants, specifically Acenocoumarol. This symptom can be managed by discontinuing or withholding of drug and switching to safer oral anticoagulants for mid to long-term anticoagulants after stabilization. The patient is advised to have regular follow-up to monitor their condition.

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