**Description of Case Study-1:**

A 27- year- old male named Harsha Mohit had visited the clinic with a chief complaint of headache and running nose. General physical examination was performed along with complete blood picture and vitals recorded. Everything seemed to be normal. A provisional diagnosis of sinusitis was made based on the chief complaint and initial examination. To validate this diagnosis and formulate a final diagnosis, an endoscopy was performed which confirmed the provisional diagnosis. Fluticasone propionate nasal spray in the form of suspension was prescribed to the patient with a dosage of 93mcg to be taken through each nostril two times a day (Mayo Clinic, 2021a). After few days, on 7/30/2022, the patient was seen at the emergency clinic reporting motorcycle accident. The patient was presented with bleeding from multiple body sites. On examination, head injury was detected. Basic first aid was performed to the patient to control bleeding. A referral visit is scheduled for the patient to visit the neurologist. Later MRI scan was performed to diagnose the head injury. Results indicated there was no damage and prophylactic medication was prescribed. 10 tablets of carbamazepine 200 mg were given to be taken twice daily for five days (Mayo Clinic, 2021b). An ointment neosporin of 28 grams was prescribed to be applied on injured areas thrice daily (WebMD, n.d.). In order to relieve the mild body aches the patient might experience, acetaminophen of dosage 325mg was prescribed to be taken 3 times a day orally for a week. A follow up appointment was created after 2 weeks. At the follow up, injuries seemed to be healed and the prophylactic medication, carbamazepine was discontinued. Patient is advised to apply the topical ointment and take the acetaminophen when pain is felt.

**Description of Case Study- 2:**

A 31- year- old male named Ram Chandra had visited the clinic for routine physical examination. Complete blood picture, fasting blood glucose and general physical examination was performed on the patient. Patient is diagnosed with type-2 diabetes based on the tests and examination done. To treat diabetes mellitus, physician has prescribed medication of metformin in the form of tablet with a dosage of 1000 mg to be taken through oral route twice daily (Mayo Clinic, 2022d). After few days, on 09/01/2019 patient visited the emergency department reporting a fall incident from cliff. Patient was presented with swelling of left hand reported immense pain. Basic first aid was done, and analgesic was prescribed to relieve the pain. A provisional diagnosis of radial fracture was made, and patient referred to orthopaedist. A radiograph / X-ray of the left hand was recommended. Diagnosis of radial fractured was confirmed. Left hand immobilized and advised to take rest for 4 weeks. To relieve the pain, acetaminophen was prescribed to be taken twice daily for 10 days. A follow up appointment was created after 1 month. At the follow up, fracture seemed to be healed and the prophylactic medication, acetaminophen was discontinued. Patient was advised to take acetaminophen when pain is felt.

**Description of Case Study-3:**

A 71-year- old female named Shakti Sinha came to the medical office with a chief complaint of mild difficulty in breathing. A routine physical examination was performed on the patient with complete blood picture. After initial examination, a provisional diagnosis of asthma was made. To confirm the initial diagnosis, a chest X Ray was prescribed for the patient. This confirmed the provisional diagnosis and a final diagnosis of Asthma was formulated for the patient. Salbutamol with dosage 1000mcg was prescribed to the patient in the formal of nasal spray to be inhaled four times a day. The patient was appointed for regular follow up every six months. After a few months on 08/04/2022 patient was seen at the emergency department with an accident due malfunction of shotgun. Injury was noticed on right shoulder. At the time of visit, bleeding was moderate with inflammation. Patient was presented with severe pain. First aid was performed on the patient, and she was referred to orthopaedic surgeon. Later an X ray of the right shoulder was taken and wound debrided. Suturing was done to the patient by the orthodontist. Antibiotic amoxicillin of 500 mg in the form of tablet to be taken orally thrice daily for 5 days was prescribed to control the infection (Mayo Clinic, 2022a). Pain reliever morphine was recommended with a dosage of 15mg to be taken whenever pain was felt for the initial 1 week (Mayo Clinic, 2022c). Patient was asked to follow up after 3 weeks. At the follow up, injury seemed to be healed and the medication, amoxicillin and morphine were discontinued.

**Description of Case Study -4:**

A 51-year-old female named Deepika Singh visited the hospital with a chief complaint of chest pain. Complete blood picture along with routine physical examination. A provisional diagnosis of angina pectoris was made based on the chief complaint and past medical history. To confirm the provisional diagnosis, an Electro Cardiogram was performed and angina pectoris was formulated as final diagnosis. Nitro-glycerine was prescribed to the patient with a dosage of 2.5 mg to be taken through oral route two times a day. The patient was kept on regular follow up for every six months. After few days on 10/05/22 patient was seen at the emergency department as she was in contact with dry ice that resulted in burning of her hand. Basic first aid was performed and patient referred to dermatologist. Topical analgesic-lidocaine was prescribed to relieve pain. Referral to dermatologist to diagnose the burn and was concluded to be first degree burn. Topic lidocaine was prescribed along with pain reliever-ibuprofen. The dosage of lidocaine ointment was 25gm to be applied on the wound four times a day (Mayo Clinic, 2022b). The dosage of ibuprofen is 200mg which has to be taken through oral route two times a day. Regular follow up appointments created for the patient for every 4 weeks for 3 months. At the follow up, the burns seemed to be healed and the prophylactic medications lidocaine and ibuprofen were discontinued gradually.

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