

Case FBS 1 PBL 5 Part 1

Felix woke up with severe pain in his left big toe

Felix, a 55 year-old obese white man, goes to an urgent care center complaining of intense pain in his left great toe. The pain was so excruciating that he was awakened from sleep this morning at 4 am and was unable to bear the pressure of the bedsheets on his foot.

Felix has just retired from his own fast food business. His body shape clearly reflects his passion in life. The night before his retirement, Felix and his employees celebrated his last day of work.

While he is waiting for the doctor to see him, Felix tells the nurse that the only thing he remembers from the night before is having a feast, including a big juicy steak, salmon, scallops, steak fries and innumerable bottles of beer. He does not remember falling or injuring his foot.

On physical examination, he has a fever (101°F) and his big toe is red, hot, swollen and very tender to touch. He claims that he never has felt this kind of pain in the past and has no history of joint problems. There is no history of this type of condition in his family. His blood pressure is 140/90 mm Hg, and he tells the doctor that he is taking hydrochlorothiazide.

After the physical examination, the doctor decides to run some laboratory tests and perform an arthrocentesis of the first metatarsophalangeal joint. He requests blood analyses, X-rays of the left foot, and sends the synovial fluid from the joint for analysis. To help relieve the discomfort, he prescribes for Felix a non-steroidal anti-inflammatory medication.

Felix is scheduled to return the next morning for a follow-up visit.

Questions

1. Is it possible that too much alcohol and the type of food at the ‘feast’ last night contributed to his condition?
2. Could the fever be related to the red, hot and swollen toe?
3. What blood analyses were ordered and what is the rationale for ordering X-rays?
4. What is the rationale for the arthrocentesis of the big toe?
5. What kind of drug is hydrochlorothiazide?

References

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Lippincott's Illustrated Reviews Biochemistry, 6th Edition, Harvey and Ferrier, Lippincott, Williams and Wilkins, 2013.

Primer on the Rheumatic Diseases, Klippel, Springer, 2008.