

SUBACUTE OSTEOMYELITIS IN INDEX BY HUMAN BITE: TO CASE REPORT

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ABSTRACT

Contiguous infections and systemic dissemination of pathogens are the most frequently causes of osteomyelitis, being the *S aureus* the major causal agent in both cases. Osteomyelitis secondary to human bites is rare and severe complication of bite wound mechanism. Bite injuries are difficult to diagnose in the emergency department, both for its infrequently and the lack of information about the origin of the injury on the part of the patient, for fear of the medical-legal consequences. In addition, due to the variety of aerobic and anaerobic pathogens constitute a true therapeutic challenge. We present the case of still osteomyelitis secondary to human bite, which presents all of the clinical and radiographic signs that should make us suspected of this disease and begin the management quickly, and it represents the main forecast factor. The wound by human bite should be suspected and treated properly in the emergency department, since the first 24 hours are crucial for the later forecast. The cooperation between specialists reduce the risk of complications, being the emergency department the most important factor to its diagnosis.

KEY WORDS: Human bite, hands infection

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Introduction

The wounds by bite human are infrequent in the practice clinic, say following two scenarios: the true wounds by bite and the wounds associates to trauma by fist closed either 'clenched fist injury'. (1,2)

The first usually affect to the phalanges of the hand, provoking

wounds superficial that strange time present complications; without embargo the second are produced by trauma of high energy that usually affect to the expensive dorsal of the metacarpus phalangeal, penetrating in blueprints deep and they can produce complications such as cellulitis, abscesses of parts soft, arthritis septic and osteomyelitis it that can trigger devastating aftermath that go from the rigidity until the need of amputation. (2,3)

Of made, the saliva human contains in turnstile to 100,000,000 of microorganisms by milliliter and nails 42 species bacterial say differently, by that No is of miss he high can infective of are wounds. (4,5)

The most of the crops of wounds by bite human present a flora mixed and the germs further frequently found are he *S. pyogenes*, *S. aureus*, anaerobes gram positive and AND. *Corrodens*. (2.6)

The importance of are wounds lies in his combination of mechanism of high energy, great inoculus bacterial and limited injury skin that does that many occasions No be handled properly it that entails great morbidity for the patients and the possibility of appearance of serious complications. (7)

Case clinical

HE treats of a male of 48 years of nationality romanian worker of the field, hipertensive and smoker of 10 cigarettes to the day, without others background of i interest, that go to emergencies by fever and signs of infection local in the first phalanx of the second finger of his hand left, as background recounts a wounded by bite human two months before in the context of a fight, reason by he which consulted in the service of emergencies of others hospital five days before if I go handled with antibiotic oral (amoxicillin-clavulani co).

TO his arrival to emergencies highlight one temperature of 40. L °C, tachycardia, shaking chills, sweating and signs of infection local (erythema, swelling, pain to the palpation and sewer system sero-purulent to a fistula skin) in the index of his hand left and right (fig. 1)



Fig. 1 .Image clinic of the injury, see the fistula skin

In the analytical stand out a PCR of 73. he mg/mL with leukocytosis and neutrophilia; and in the plain radiography of hand the presence of an abscess of brodie and signs of osteomyelitis subacute. (fig. 2)



Fig. 2. x-rays PA and oblique of hand, notice the presence of flaw cavitary (abscess of Brody) and the signs of osteomyelitis

He decided get into to the patient for treatment through antibiotic therapy intravenous until his stabilization clinic and program posteriormente the intervention.

TO the two weeks, after the stabilization clinic of the patient, HE intervino through extension of edges of her i da i identifying injuries in apparatus extender, capsule articulate and phalanx proximal and HE debrided with curettage aggressive of the cavity osteomyelitis ca previous decortication with chisel and take of samples, washed abundant and stuffed of the my sma with substitute osseous of sulfate calcic with

vancomycin and gentamicin (They stimulate from biocomposite). (Fig. 3)

After the intervention, if got a crop positive _ for S. hominis that HE man e i o with antibiotic therapy intravenous directed by the unit of diseases infective during 1 OR days.



Fig. 4. AP radiographs and oblique of control to the six months with stuffed appropriate of the flaw cavity.

to the 6 months of the surgery, he patient HE found good asymptomatic with stuffed the c, radiologic of cavity, standardization of the parameters analytical and absence of signs of infection local in the index of his hand left. (fig . 4)



Fig. 3. Images operative, identifying the injury of apparatus extender and he flaw cavity, in the last the cavity HE finds stuffed after he curettage with sulfate calcic

with Vancomycin and gentamicin

Discussion

TO weigh of be a strange complication (<23) the wounds by bite human they can arrive to get complicated in osteomyelitis as in our case, between the factors predisposing development of the my same _ HE include he delay elderly of 24h in he debridement and he i inappropriate driving inia .(3,8)

Of made, he diagnosis early of this guy of injuries supposed a challenge, fundamentally due to that HE produce in patients conflicting you, bit compliant and that in many occasions. No usually confess he mechanism causal because of fear to the possible repercussions legal.(4)

Is and also i m important learn to explore correctly are injuries, being forced the examination in flexion of metacarpo-phalangeal, of Way that HE reproduce the pathological anatomy of the injury _ being able i identify myself the injuries in depth to the align them with the wounded _ skin; already that in numerous occasions exists affectation of the apparatus extender, the capsule articulate , he cartilage

joint and even fractures
o
r bony. (2.8)

In the exploration physical stand out the appearance of signs local of i nflammation So as the possibility _ _ of fistulization either training of abscesses in parts soft; although is infrequent can to

(fever, shaking chills, evil state general...); The appearance of the signs cardinals of kanaveldebe make us think in a tenosynovitis infectious , and he pain with the mobility passive articulate , the presence of a arthritis septic.(9)

Analytically, stand out the leukocytosis _ with neutrophilia So as the elevation of PCR and ESR although in many cases can appear as normal, it that hinders he diagnosis. (2.7)

Radiologically, in cases of osteomyelitis subacute, either chronicle they can appear osteolysis either training of abscesses of Brody e (703), osteopenia (he 03), reaction peri ostica (l 03), osteosclerosis (103) either training of kidnappings and you involve (53) (2.5)

For he diagnosis of certainty HE needs a biopsy I mean compatible either a crop positive.(7)

In how much to the treatment, many authors advocate by he 'odd BITES' (Open treatment, Drugs, débridement, Bloodwork, Irri gation, Tetanus prophylaxis yes, exploration and swabs), is say, combine a driving doctor and surgical suitable consistent in enlarge the edges of the wound, do a thorough exploration of the injuries deep, take samples provoke symptomatology systemic

for crop, carry out a debridement aggressive with irrigation abundant and combine it with a treatment doctor through antibiotic intravenous led directed So as prophylaxis antitetanus.(1 ,2 , 7 , 10)

In conclusion, for avoid the potentials complications of the wounds by bite human are fundamental he diagnosis and treatment early and appropriate, if I go by so much clue the collaboration by part of surgeons orthopedic with the services of emergencies, the doctors of attention primary and the services of diseases infectious.

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