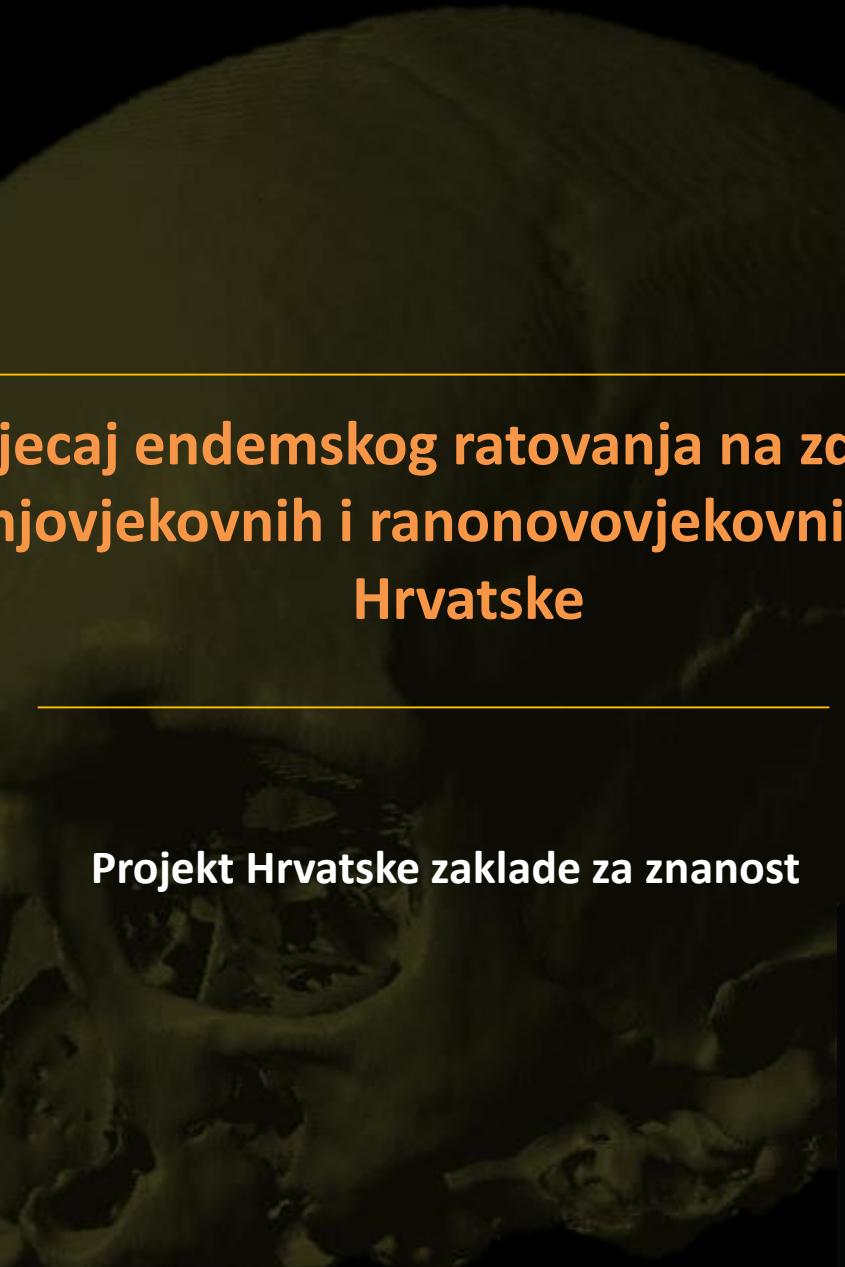

Utjecaj endemskog ratovanja na zdravlje kasnosrednjovjekovnih i ranonovovjekovnih populacija iz Hrvatske

Projekt Hrvatske zaklade za znanost



Projekt je okupio internacionalnu i multidisciplinarnu ekipu vrhunskih stručnjaka



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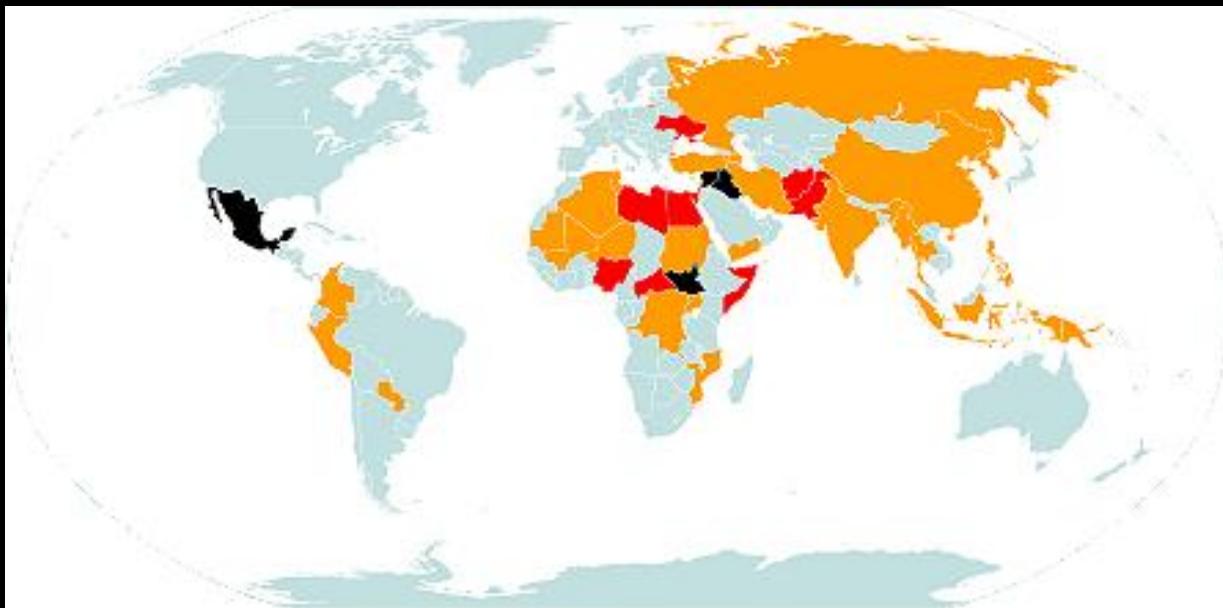
Projekt se bavi fenomenom ratovanja



odnosno posljedicama koje ono ima na
zdravlje populacija koje su u njega uključene



Ratovi, nažalost, još uvijek fundamentalno utječu na moderan svijet



Sirija, Irak, Sudan,
Meksiko, Burma,
Izrael/Palestina,
Afganistan, Somalija,
Nigerija, Pakistan,
Egipat, Libija, Ukrajina,
Kašmir, Kolumbija,
Filipini itd...

Usprkos činjenici da je mortalitet koji je rezultat ratovanja najčešće jako podzastupljen, ratni sukobi danas predstavljaju treći najvažniji uzrok smrti na svijetu.

Obilježja modernih ratova

U novije vrijeme – od kraja Drugog svjetskog rata, uočene su tri suštinske promjene u prirodi rata:

- 1) Znakovito povećanje broja ratova - trenutno se vode 42 rata u svijetu,
- 2) Znakovito produljivanje vremenskog trajanja tih sukoba - rat između Izraela i Palestine traje već 66 godina, sukobi u Afganistanu 36 godina, a sukobi u Somaliji 24 godine.



Prijelaz na interne ili građanske ratove

3) ...i možda najvažnija promjena koja karakterizira moderne ratove jest znakovito povećanje broja internih ili građanskih ratova u odnosu na eksterne ratove – ratnih aktivnosti usmjerenih prema nekom vanjskom neprijatelju. Kao rezultat toga krajem 20. st. 2/3 svih ratova na svijetu bili su unutrašnji sukobi - vrsta ratovanja koju karakterizira nisko intenzitetno, endemsko nasilje za koje međunarodna zajednica još uvijek nema efikasne mehanizme kako bi ga zaustavila.



Ratovanje nije moderan fenomen

Analiziranje posljedica koje ratovanje ima na zdravlje, kroz duboku vremensku perspektivu koju arheološka i antropološka istraživanja nude, može dati jedinstvene spoznaje o interakcijama između ratovanja, zdravlja i okoliša.

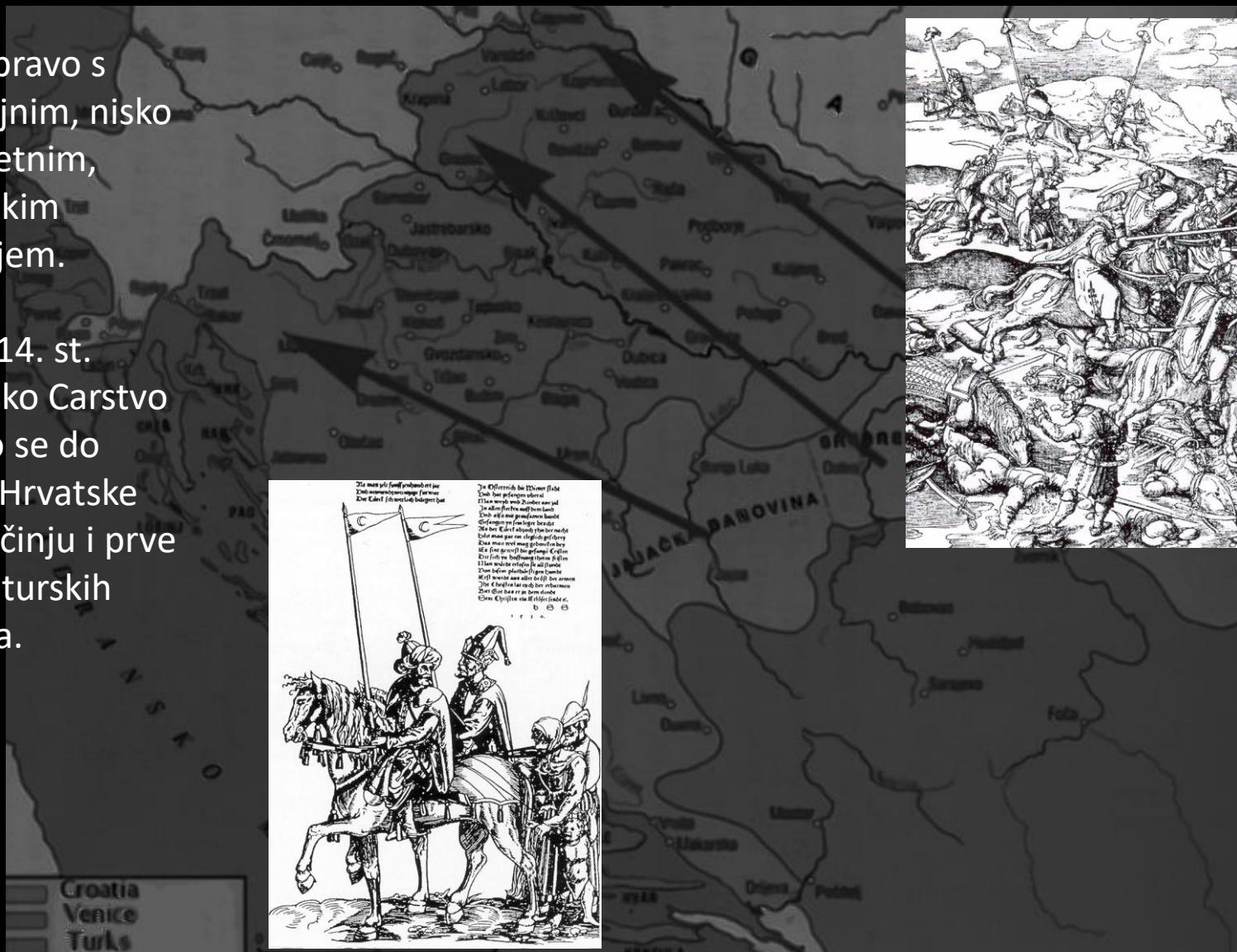
Te se spoznaje mogu koristiti i implementirati kako bi se poboljšalo stanje u nerazvijenim krajevima svijeta gdje se većina današnjih ratova vodi.



Nažalost, mi imamo puno iskustva s ratovanjem...

... i to upravo s dugotrajnim, nisko intenzitetnim, endemskim ratovanjem.

Krajem 14. st.
Osmansko Carstvo
proširilo se do
granica Hrvatske
kada počinju i prve
provale turskih
akindžija.



U projektu se analiziraju dva velika kompozitna koštana uzorka iz Hrvatske

Prvi uzorak ima oko 1200 kostura sa 16 kasnosrednjovjekovnih nalazišta datiranih u razdoblje između 1100-1400

Drugi čini oko 2000 kostura s 19 ranonovovjekovnih nalazišta datiranih u razdoblje između 1400-1700.

Oba su pohranjena u Osteološkoj zbirci Hrvatske akademije znanosti i umjetnosti.



Podaci koje u projektu prikupljamo uključuju

Paleodontološke podatke o dentalnom zdravlju: učestalost i distribuciju karijesa, zaživotnog gubitka zubiju, alveolarne resorpcije, kalkulusa itd., koji...

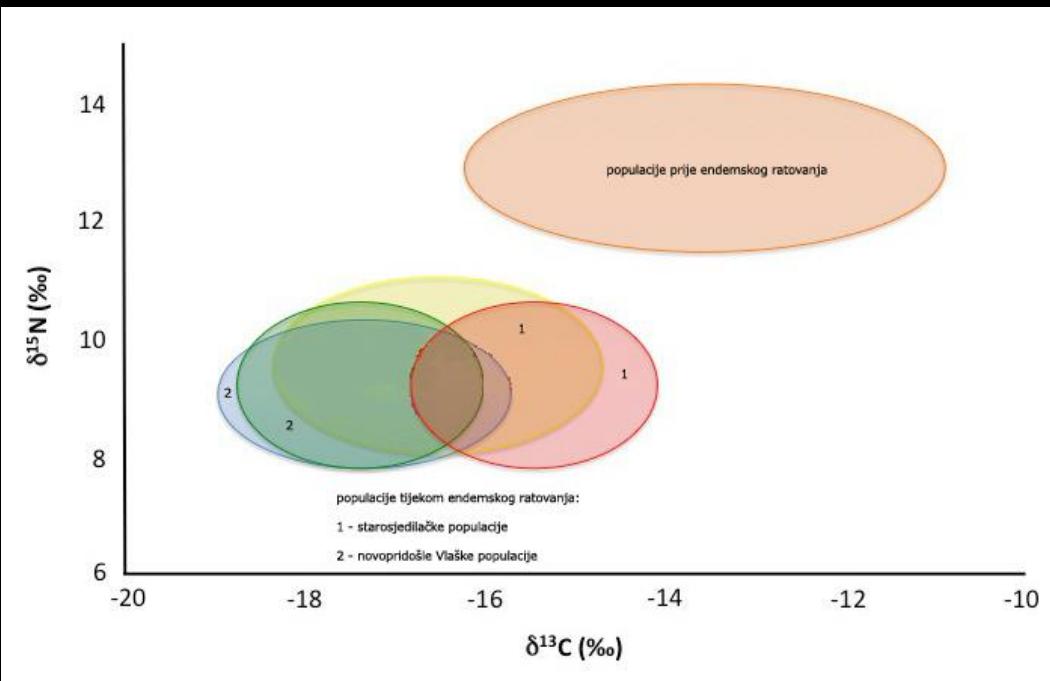
...zajedno s rezultatima analize stabilnih izotopa ugljika $\delta^{13}\text{C}$ i dušika $\delta^{15}\text{N}$ omogućuju identificiranje 4 izotopski različite vrste prehrane:

1. C_3 kopnene prehrane (žito, ječam, raž i životinje koje konzumiraju te biljke),
2. C_4 kopnene prehrane (proso i životinje koje proso konzumiraju),
- 3.morske prehrane – morske ribe i mekušci,
- 4.slatkovodne prehrane – slatkvodne ribe



Preliminarni rezultati pokazuju promjenu prehrane s većim udjelom proса i, iznenađujuće, više mesa u prehrani ranonovovjekovnih populacija

Analize dentalnog zdravlja pokazuju značajno niže učestalosti karijesa, apsesa, alveolarne resorpcije i abrazije griznih ploština zubiju kod populacija koje su bile izložene endemskom ratovanju



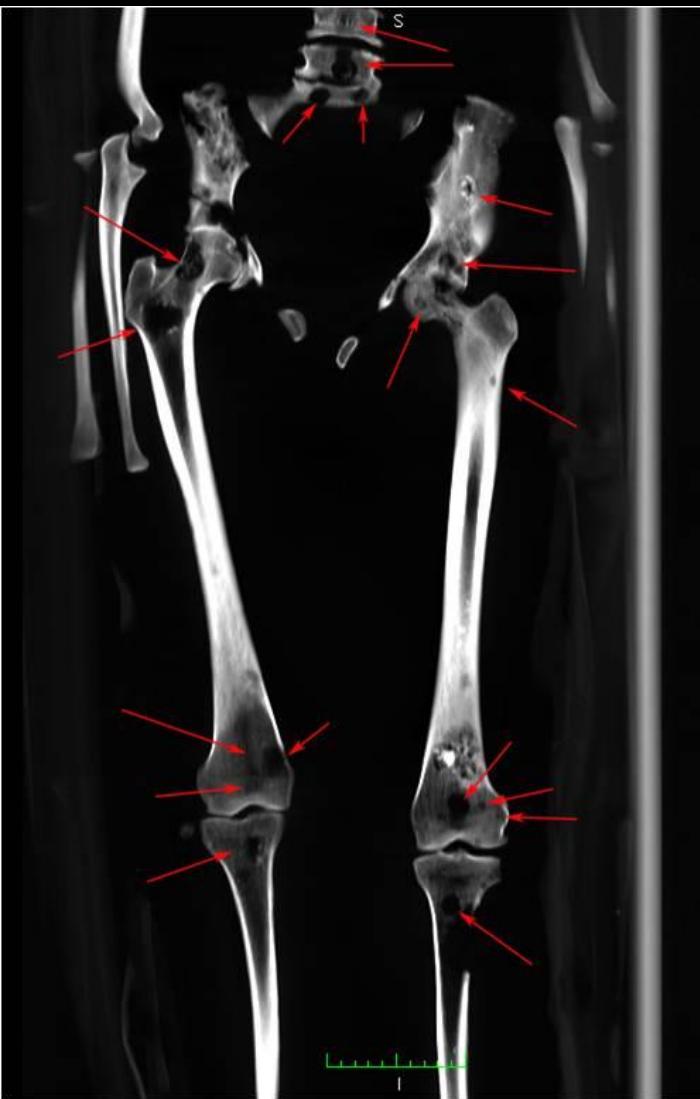
Analize stabilnih izotopa ugljika $\delta^{13}\text{C}$ i dušika $\delta^{15}\text{N}$ također potvrđuju promjenu prehrane s većim udjelom proса i mesa u ranonovovjekovnim populacijama koje međusobno pokazuju naglašenu dihotomiju odnosno prisutnost dva zasebna klastera: starosjedilačke populacije i novopridošle vlaške populacije

Paleopatološke i paleoradiološke analize



Analizirana je prisutnost zaraznih, metaboličkih i reumatskih bolesti te neoplazija

Neke bolesti, koje su danas vrlo česte, u analiziranim su uzorcima izuzetno rijetke



Prema lokalizaciji i izgledu lezija možemo sa sigurnošću ustvrditi da je ova osoba umrla od uznapredovale, metastazirajuće osnovne bolesti.

Mogući uzročnici uključuju karcinom štitne žlijezde, karcinom prostate, karcinom debelog crijeva itd.

I obrnuto, bolesti koje su danas rijetke nekoć su bile dominantne

Nespecifični periostitis je upalna reakcija koja nastaje kao posljedica bakterijske infekcije. Makroskopski izgleda kao nova, slabo organizirana kost dobro definiranih rubova koja prekriva originalnu kortikalnu kost.



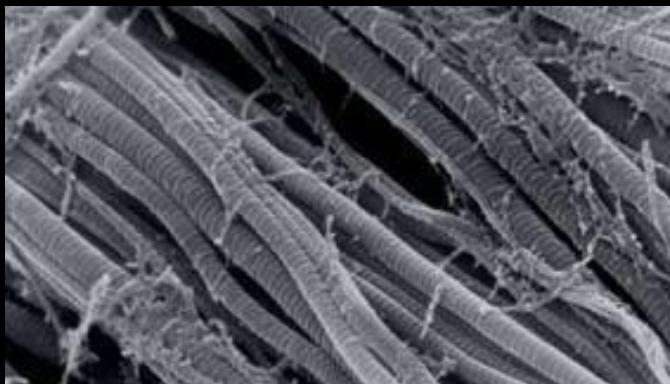
Analize zaraznih bolesti pokazuju značajno povećanje tijekom endemskog ratovanja, primarno kod djece

Starost (god.)/spol		Pred-endemsko ratovanje		Endemsko ratovanje	
		O/A	%	O/A	%
0.0–0.9		25/15	60.0	18/10	55.5
1.0–3.9		34/8	23.5	62/21	33.9
4.0–9.9		41/4	9.7	50/12	24.0
10.0–14.9		31/2	6.4	25/10	40.0
Sva djeca		131/29	22.1	155/53*	34.2
Žene 15–29		44/6	13.6	61/8	13.1
Žene 30–44		67/3	4.5	57/4	7.0
Žene 45+		30/0	0.0	34/2	5.9
Sve žene		141/9	6.4	152/14	9.2
Muškarci 15–29		57/7	12.3	67/9	13.4
Muškarci 30–44		69/4	5.8	87/11	12.6
Muškarci 45+		31/1	3.2	40/0	0.0
Svi muškarci		157/12	7.6	194/20	10.3
Sve odrasle osobe		298/21	7.0	346/34	9.8

* $\chi^2 = 4.27$; P = 0.038

Analize metaboličkih bolesti

Skorbut je kronična metabolička bolest koja nastaje zbog nedostatka vitamina C koji je neophodan za stvaranje kolagena. Kolagen je fibrozni strukturni protein sastavljen od tri polipeptidne niti i jedan je od glavnih sastojaka vezivnog tkiva.



Food and Nutrition Bulletin, vol. 24, no. 3 © 2003, The United Nations University.

An epidemic of scurvy in Afghanistan: Assessment and response

Edith Cheung, Roya Mutahar, Fitzsum Assefa, Mija-Tesse Ververs, Shah Mahmood Nasiri, Annalies Borrel, and Peter Salama

Editorial note

The following article describing an epidemic of scurvy in mountainous Afghanistan emphasizes the contemporary risk of this ancient deficiency disease, especially in settings of complex emergencies and social-agricultural disruption. Such a setting is, sadly, all too common for serious nutritional emergencies. We intend to give greater emphasis in this journal to assessment and interventions in complex and extended emergencies related to drought, conflict, and cultural disasters.

Abstract

In March 2002, there were reports of a hemorrhagic fever outbreak in western Afghanistan. At first it was believed that the hemorrhagic symptoms and increased mortality were actually due to scurvy. Most aid workers did not include scurvy in the initial differential diagnosis because it is uncommon throughout the world and has mainly been reported in refugee populations in recent times. A

the last four years, asset depletion, and loss of livelihood. After numerous food and fortification options to prevent future outbreaks had been considered, vitamin C tablet supplementation was selected because of the relatively rapid response time compared with other prevention methods. A three-month course of vitamin C tablets was distributed to 827 villages in at-risk areas. The tablets were accepted and well tolerated by the goons. No cases of scurvy were reported for the winter of 2002–2003. This case study from Afghanistan demonstrates that scurvy can occur in nonrefugee or nondisplaced populations; vitamin C supplementation can be an effective prevention strategy; there is an urgent need to develop field-friendly techniques to diagnose micronutrient-deficiency diseases; food-security tools should be used to assess and predict risks of nutritional deficiencies; and the humanitarian community should address prevention of scurvy in outbreak-prone areas.

Key words: Afghanistan, emergencies, micronutrient deficiency, scurvy, vitamin C

Brief Communication

Outbreak of scurvy among prisoners in South Ethiopia

Araya Giday

Abstract

Background: Scurvy is caused by a deficiency of ascorbic acid. Hence, ascorbic acid has to be regularly supplemented through diet or with tablets.

Objective: To describe the clinical feature of scurvy among prisoners admitted to Yirgalem Hospital.

Methods: An observational study done on a total of 38 male prisoner patients over one month. Data were collected using structured questionnaire and analysis was done using SPSS 16.0.

Results: All 38 patients had limb swelling and 35 of them had distal limb numbness, tingling and burning sensation. After five days of vitamin C administration patients' leg swelling, hematuria, cough and gum bleeding subsided completely, and the value of hemoglobin was also raised from (10.3±3.31) to (12.7±2.26) with treatment. Nutritional history revealed that there were no vegetables, fruits or animal products in their diet. Their imprisonments ranged from eight to forty nine months with an average of 19.3 months.

Conclusions: Symptomatic scurvy is common in male prisoners imprisoned more than eight months. Unilateral limb swelling, bilateral distal neuropathic pain and bleeding diathesis are common presentation of scurvy. [Ethiop. J. Health Dev. 2012;26(1):60-62]

Introduction

Humans cannot synthesize ascorbic acid because of a lack of an enzyme guluronolactone oxidase. Hence, ascorbic acid has to be supplemented mainly through fruits, vegetables and tablets (1). A deficiency of ascorbic acid leads to scurvy, which is characterized by spongy swollen bleeding gums, dry skin, sores on the skin, fatigue, impaired wound healing and depression (2).

Scurvy is a rare occurrence nowadays because of adequate intake of ascorbic acid. The average daily intake level that is sufficient to meet the nutritional requirement of ascorbic acid for adults is 90 mg/day for men and 75 mg/day for women (3).

Ethical Considerations

The research was conducted after getting ethical clearance from the Hawassa University College of health sciences institutional review board and permission from the Yirgalem Hospital Administration. Informed consent was also obtained from each study participant. All cases were treated with vitamin C. All patients were given biochemical parameters before and after supplementation of vitamin C. All cases were followed as cohort cases with unique code.

Data were cleaned, entered and analyzed using SPSS version 16.0. The analysis consisted of basic summaries of patients conditions.



Makroskopsko prepoznavanje skorbuta na kostima

Skorbut se prepoznaje po abnormalnom, bilateralnom porozitetu na hvatištima jakih mišića.



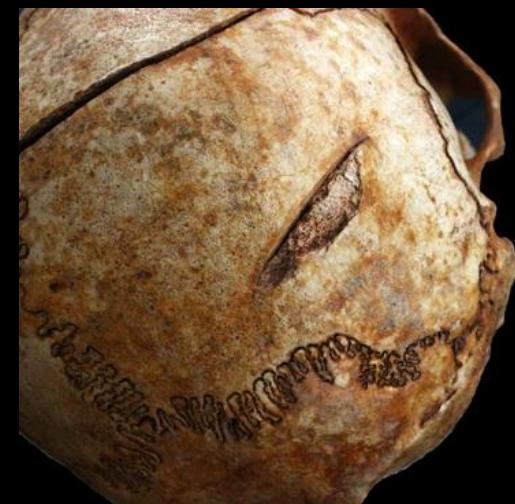
Analiza skorbuta pokazuje značajno povećanje bolesti tijekom endemskog ratovanja, najviše kod muškaraca

Starost (god.)/spol		Pred-endemsko ratovanje		Endemsko ratovanje	
		O/A	%	O/A	%
Žene 15–29		44/3	6.8	61/2	80.3
Žene 30–44		67/0	0.0	57/2	71.9
Žene 45+		30/0	0.0	34/2	55.9
Sve žene		141/3	2.1	152/6	3.9
Muškarci 15–29		57/4	7.0	67/10	14.9
Muškarci 30–44		69/2	2.9	87/9	10.3
Muškarci 45+		31/0	0.0	40/0	0.0
Svi muškarci		157/6	3.8	194/19*	9.7
Sve odrasle osobe		298/9	3.0	346/25**	7.2

* $\chi^2 = 3.82$; P = 0.05

** $\chi^2 = 4.85$; P = 0.02

Analize trauma

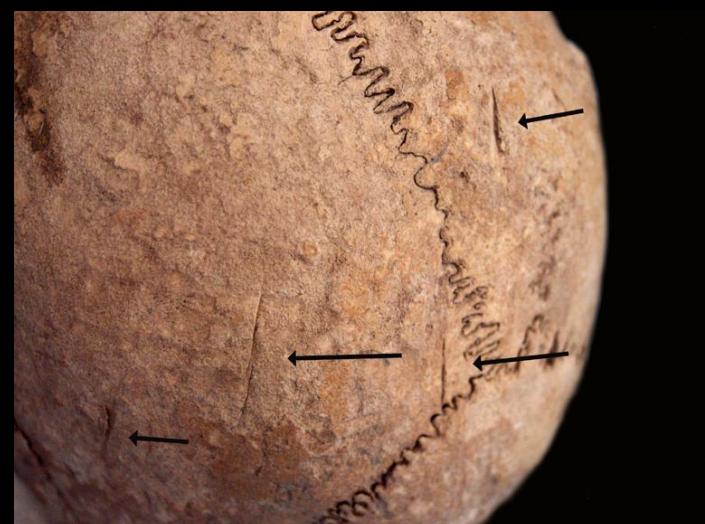
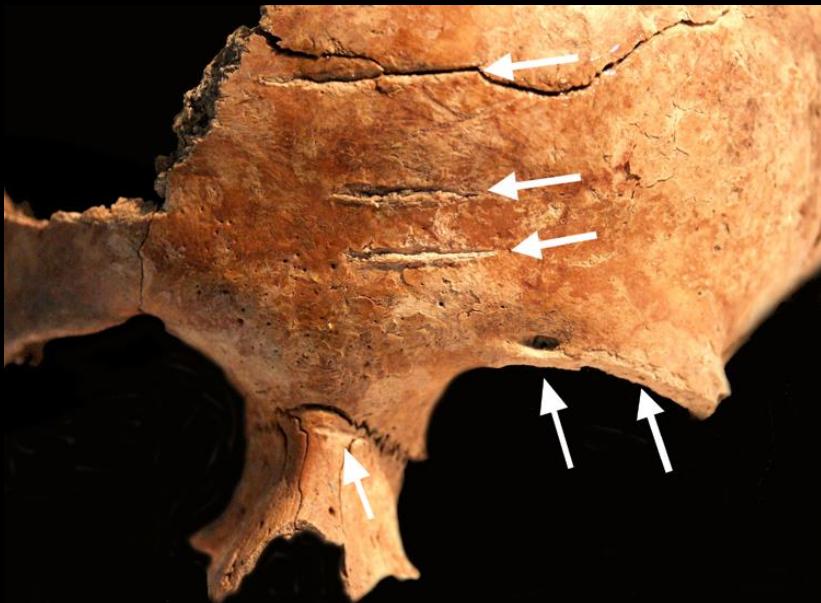


Traume mogu biti antemortalne/perimortalne i rezultat nesretnih slučajeva/namjernog nasilja

Traume kod muškaraca



Traume kod žena



Radovi koji su nastali kao rezultat rada na projektu

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Radovi koji su prošli recenziju i u procesu su objavljuvanja:

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Hvala Vam na pozornosti!

