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Human Skeletal Remains Analysis from Pallemalala Shell Midden in Southern Sri Lanka

Análisis de Restos Óseos Humanos del Vertedero de Conchas de Pallemalala en el Sur de Sri Lanka

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SUMMARY: Sri Lanka, an island off the tip of the Southeast of the Indian subcontinent processes the earliest skeletal evidence of anatomically modern *Homo sapiens* (37,000 B.P.) and the best human skeletal record sequence in the South Asian region. Adding another to the list, the skeletal remains, which belong to Mesolithic culture were found at Pallemalala shell midden in Southern Sri Lanka during scientific archaeological exploration by Postgraduate Institute of Archaeology, University of Kelaniya. Sri Lanka. The aim of the study was to determine the minimum number of human individuals, age, sex, and pathological conditions related to the ancient Pallemalala commiunity. For the primary analysis, 426 bone fragments were available. Out of those, 233 bones were identified as human bones which represent 7 minimum number of individuals. The rest of the collection comprises some animal bones and shell species. The community was predominated by the female population. The identified age categories were around 20 years, between 35-45 years, and over 45 years. The encountered pathological lesions were bone thickening, alveolar resorption, dental abscesses, dental caries, antemorterm tooth loss, calculus deposits and brown colour stains on teeth. Regarding the dietary pattern, it was evident that their diet may have consisted of coarse foodstuffs with an extremely basic dietary chemistry.

KEY WORDS: Human, Skeletal remains; Sri Lanka; Pallemalala; Shell midden.

INTRODUCTION

Sri Lanka is an island, off the tip of the Southeast of the Indian subcontinent and separated from the Indian mainland by the Palk Strait and the Gulf of Mannar. In archaeological prospects, there is secure evidence of prehistoric human settlements in Sri Lanka spanned up to 125,000 BP (Deraniyagala, 1992). This evidence stems from an excavation conducted in Southern coastal deposits near Pathirjawela. These people made tools of quartz and chert which are assignable to a Middle Palaeolithic complex. Interestingly, human skeletal remains of the country span a variety of time horizons; Mesolithic period (37000-2900 B.P.), Protohistoric period (2900-2500 B.P.), and Historic period (2500 B.P. - present) (Hawkey, 1998). The most precious and fascinating finding among these osseous remains was that presence of earliest skeletal evidence of anatomically modern *Homo sapiens* in South Asia which was dated to 37000 years (Deraniyagala, 1992; Kennedy, 2000).

The prehistoric human skeletal record of the country is much more complete and represents the best human skeletal record sequence present in South Asia (Kennedy, 1993). This information stems from a series of excavations; Fa Hien Lena (37,000 BP), Batadomba-lena (31,000 BP, 28,500 BP and 16,000 BP), Belilena-Kithulgala (12,000 BP and 2700 BC), Belilena-Athula (27,000 BP-3,000 BP), Alu lena (10,500 BP), Bellan-bandi Palassa (6,500 BP), Pothana (6,500 BP) and Miniatheliya (3,600 BP) (Deraniyagala, 1992; Kennedy *et al*., 1986; Kennedy *et al*., 1987; Kennedy & Deraniyagala, 1989; Kennedy, 2000; Deraniyagala, 1987; Kennedy, 1993; Adikari 1994; Kulatilake, *et al*., 2014). The end of the Mesolithic culture has not yet been clearly defined, although it is considered to have occurred at 2,900 BP, with a rapid transition to Sri Lankan Iron Age (Deraniyagala, 1992). The evidence of protohistoric Iron Age comes from excavation at Anuradhapura (800 BC), Aligala shelter

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(850BC), Ibbankatuwa (400 BC) and Pomparippu (200 BC) (Kennedy, 1975; Deraniyagala, 1992; Lukcas & Kennedy 1981; Hawkey, 1998; (Kennedy, 1993). The historic period of Sri Lanka commenced at 500 BC with the finding of Indo-Aryan Prakrit inscriptions on pottery at Anuradhapura (Deraniyagala, 1992).

Adding another to the list, the human skeletal remains, which belong to Mesolithic Culture were found in 1997 at Pallemalala shell midden in Southern Sri Lanka during scientific archaeological exploration under the supervision of the Postgraduate Institute of Archaeology (PGIAR), University of Kelaniya. The site Pallemalala carries remarkable importance as these skeletal remains are the first to be found from a shell bed site in the Sri Lankan context. There are three hypotheses regarding shell bed formation (Katupotha, 1995). The first is that shell valves of lagoons were accumulated as in situ consequently on the lowering sea level. Scientists have investigated that the mid-Holocene sea level was at least 1.5 m above that of the present level with three episodes; 1st-6240-5130 B.P., 2nd-4390-3930 B.P., 3rd-3280-2270 B.P. The second is that the majority of the shell valves of the shell beds have been piled up by exceptional storm wave action in lagoons. The third one is the deposition sequences of shells due to discarded shells by early inhabitants. The geographic location of Pallemalala is in longitude 810 10' 06" and latitude 60 11' 14" in the Hambanthota district of Southern province (Fig. 1). Geologically the site comprises the hornblende and biotite gneisses with associated migmatite of Vijayan series whereas geomorphologically the site Pallemalala is laid on low land I unit, which is completely flat terrain and the slope is 1⁄20 or 10 (1:100 or 1:60 in gradient) (Katupotha, 1995).

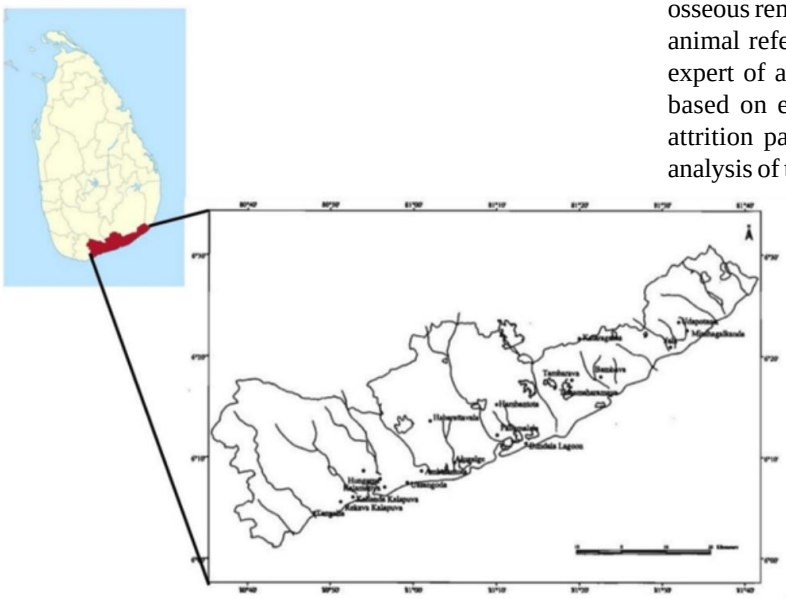

Fig. 1. Distribution of the coastal shell bed in Southern Sri Lanka.

Presently the people in Pallemalala have an old tradition of shell mining, which is the most important occupation in that area. These shells are being utilized for chicken traits and lime manufacture. When people found bone fragments in shell mining and sieving procedures, they have thrown them in a particular place. However, until 1997 no interest was shown in these remains, and finally, a scientific investigation and excavation were conducted by the in the Pallemalala shell midden by the PGIAR, University of Kelaniya. The archaeological investigation yielded numerous fragmented bones which have unknown stratigraphical positions. The archaeologists in the PGIAR assume that the only difference between these irregularly collected bones and properly excavated bones is that the former is dug by unskilled villagers. Therefore, these human skeletal materials are valuable sources of information about the lifestyle and habitat of the ancient Pallemalala people. The objectives of the study were to differentiate human bones from animal bones, calculate the minimum number of human individuals, record metric analysis of cranial and postcranial remains, determination of age, sex, and pathological conditions of the ancient Pallemalala community.

MATERIAL AND METHODO

All the osseous materials from the site were in a poor state of preservation. For the primary analysis 462 bones were available. Identification of human bones, calculation of the minimum number of individuals, sexing skeletal remains, and determine the pathological conditions were done using gross morphological traits and appearance of the osseous remains. Animal bone identification was done using animal reference collection at PGIAR with the help of an expert of archaeozoologist. Determination of the age was based on epiphyseal fusion, dental formulae, and molar attrition pattern (Brothwell, 1981; Bass, 2005). Metrical analysis of the remains was done by calibrated sliding metric vernier caliper. The femur-shaft index is calculated by the formulae; antero-posterior diameter/transverse diameter*100.

RESULTS

Out of 462 osseous remains, 233 were identified to be human whereas the rest belonged to animals. After the reconstruction of possible fragmented bones, there were 204 human bones available for analysis. Regarding the human remains, the dental materials were

in a relatively well-preserved state when compared to the cranial andpostcranial fragments.

The inventory of human skeletal remains was given in Table I. The frequencies of skeletal components used to

Table I. The inventory of human skeletal remains from Pallemalala shell midden.

Skeletal region	Type of bone	Number of bones/bony fragments	Description
Skull	Mandible	10	1- Complete mandible 6- Left parts of mandibles 3- right parts of mandibles
	Maxilla	4	1- left part of maxilla 3- right parts of maxilla
	Cranial vault	95	2- frontal fragments with glabella 2- left frontal fragments with orbital rim 3- right frontal fragments with orbital rim 4- unsided frontal fragments 1- left zygomatic fragment 1- right zygomatic fragment 7- left temporal fragments 5- right temporal fragments 2- left parietal fragments 3- right parietal fragments 14-unsided parietal fragment 7- occipital fragments 44- cranial vault fragments
Bony thorax	Rib	9	1- first rib fragment 8- rib fragments
Pectoral girdle	Clavicle	1	1- clavicle fragment
	Scapula	4	1- left scapular fragment with _ of glenoid fossa and acromion 2- right scapular fragments with complete glenoid fossae 1- right acromion fragment
Upper limb	Humerus	18	1- left humerus mid-shaft fragment 4- right distal humerus shaft fragments 13-unsided humerus fragments
	Ulna	9	2- left proximal ulna fragments 1- right ulnar fragment without distal end 1-right proximal ulnar fragment without olecranon process 5- unsided ulnar fragments
	Radius	1	1- left proximal radial shaft
Pelvic girdle	Oscoxae	3	1- right acetabular fragment 1-unsided acetabular fragment 1- ilium fragment
Lower limb	Femur	18	1-left proximal femur with lesser trochanter 1- left distal 2/3 shaft of the femur 3- right proximal femur shaft fragments 2- right proximal femur shaft fragments 1- femur head fragment 10- femoral shaft fragments
	Patella	1	1-Unsidded patella
	Tibia	8	1- left tibial fragment 7- unsided tibial fragment
	Fibula	9	9-Unsided fibular shaft fragments
	Foot	14	1- left calcaneus 1- unsided calcaneus 12- metatarsal fragments

calculate a minimum number of individuals (MNI) were given in Table II and the estimated MNI of the Pallemalala community was seven.

All the maxillae, and mandibles except for one were fragmented in nature. The measurements related to the only complete mandible of the collection (Fig. 2) are as follows: Bichondylar width (W1)- 111.53 mm, Bigonial breadth (GoGo)- 87.66 mm, Foramen mentalia breadth (ZZ)- 50.57 mm, minimum left ramus breadth (RB)- 31.68, left crornoid height (CrH)- 31.68 mm and maximum projective mandibular length (ML)-94 mm.

Table III shows the metric analysis of the possible dentitions. Moreover, the metrical analysis of the post-cranial bones was possible with the proximal parts of femurs and the related data were given in Table IV.

It was evidenced that 17 bone fragments were of female origin whereas 15 accounted for male origin. From the collection of the dental remains, classical oral pathological lesions such as abscesses, antemortem teeth loss, periodontal diseases, caries, and antemortem deposits of calculus on teeth with brown color stains were encountered (Fig. 3 and Fig. 4). In addition to that severe attrition of both anterior and posterior teeth was observed (Fig. 2 and Fig. 5). Interestingly, among the cranial fragments, only two abnormal bone formations were encountered: the glabella region of the frontal bone and the skull vault. Interestingly, the burnt mandibular ramus part was present in the collection.

The dental remains in the collection were in a relatively well-preserved state when compared to the cranial and postcranial fragments for age determination. As a result, age determination was mostly possible on dental remains. The Pallemalala community falls in to 3 broad age categories: around 20 years, between 35-45 years and over 45 years. Regarding the postcranial bones, there was a one ilium fragment highly suggestive of age between 16-23 years.

Among the faunal remains several species were identified; *Cervus unicolar* (sambur), *Axis axis* (spotted deer), *Bubalis bubalus* (wild water buffalo), *Sus scrofa* (wild pig) and some unidentified fish. Moreover, there were a lot of shell fragments that belonged to two shell species: *Anadara* sp. (Coekles) and *Meretrixcasta* sp. (Clams).

Table II. Estimation of the minimum number of individuals (MNI).

Bone	Left side	Right side	Complete	Unsided	Total number	Minimum number of individuals
Zygomatic	1	1	-	-	2	1
Frontal	4	3	-	-	7	4
Temporal	7	5	-	-	12	7
Parietal	1	2	-	2	5	2
Occipital	-	-	-	-	7	7
Mandibles	6	3	1	-	10	7
Maxilla	1	3	-	-	4	3
Scapula	1	2	-	-	3	2
Humerus	1	2	-	-	3	2
Ulna	2	2	-	-	4	2
Radius	1	-	-	-	1	1
Femur	2	3	-	-	5	3
Tibia	1	-	-	-	1	1
Calcaneus	1	-	-	-	1	1

Fig. 2. complete mandible found from the Pallemalala shell midden.

Fig. 3. Male mandible with antemortem tooth lost and abscesses.

Table III. Dental measurements and indices of the Pallemalala bone collection.

	Measurements (mm)				
Specimen	MD	BL	MD/BL*100	MD*BL	(MD+BL)/2
PLM-MA-02					
RC	6.69	-		-	-
RPM-1	7.28	7.30	99.73	54.14	7.29
RPM-2	6.96	8.06	86.35	56.09	7.51
RM-1	11.12	11.29	98.58	125.60	1.21
RM-2	10.78	10.47	102.96	112.87	10.62
RM-3	10.31	9.72	106.06	100.21	10.01
PLM-MA-03					
LI-1	3.52	5.74	61.32	20.20	4.63
LI-2	4.86	5.72	88.04	26.83	5.19
LC	6.04	6.21	97.26	37.51	6.12
LPM-1	6.73	8.80	76.48	59.22	7.76
LPM-2	7.35	8.66	84.81	63.65	8.00
LM-2	10.12	10.81	93.62	109.39	10.46
LM-3	0.91	10.72	101.77	116.96	10.81
PLM-MA-04					
LPM-1	5.04	6.94	72.62	34.98	5.99
LPM-2	6.01	7.41	81.53	45.49	6.78
LM-1	9.86	9.81	100.50	96.73	9.83
LM-2	9.89	9.72	101.74	96.13	9.80
RPM-1	4.81	6.27	76.71	30.15	5.54
PLM-MA-05					
LC	5.59	-	-	-	-
LI-2	3.53	6.47	54.56	22.83	5.00
RPM-1	6.01	8.33	72.15	50.06	7.17
RC	5.54	8.63	64.13	47.81	7.08
RI-2	4.42	5.50	80.36	24.31	4.97
PLM-MA-06					
LM-2	11.28	10.97	102.83	123.74	11.12
PLM-MA-07					
LM-1	11.32	10.25	110.44	116.03	10.78
PLM-MA-08					
LM-3	9.60	9.10	104.46	88.22	9.93
PLM-MA-09					
LM-1	9.96	10.64	102.13	119.4	10.92
LM-2	10.34	11.39	90.78	117.77	10.86
PLM-MX-01					
RPM-1	6.53	8.13	80.32	53.09	7.33
RPM-2	7.08	8.92	79.34	63.15	8.00
PLM-MX-02					
LC	5.08	7.95	63.89	38.86	6.51
LPM-1	5.71	8.53	66.94	48.71	7.12
LPM-2	5.73	9.30	61.61	53.29	7.50
LM-1	7.70	10.79	71.36	83.98	9.24
LM-2	8.80	10.68	82.39	93.98	9.78
LM-3	7.70	9.41	76.19	67.47	8.29
PLM-MX-03					
RM-1	8.06	10.42	77.34	83.98	9.24
RM-2	7.79	10.23	76.15	79.69	9.01
RPM-1	4.91	8.02	61.22	39.37	6.46
RPM-2	5.68	-	-.	-.	-.
RI-2	6.14	-	-.	-.	-.
RC	6.88	-	-.	-.	-.
PLM-MX-04					
RI-2	5.15	6.76	76.18	34.81	5.95
RC	5.86	8.34	61.75	48.87	7.10
RPM-1	-	-	-	-	-
RPM-2	4.89	-	-	-	-
RM-1	7.44	11.12	66.90	82.73	9.28
RM-2	8.04	11.70	34.48	94.42	9.88
RM-3	7.45	10.45	71.29	77.85	8.95

PLA= Pallemalala; MA=mandibule; MX=maxilla; MD= mesio-distal diameter; BL=bucco-lingual diameter; MD*BL= crown area index; MD/BL*100=Crown index; (MD+BL)/2= crown module; LI=left incisor; LC=left canine; LPM=left premolar; LM= left molar; RI=right incisor; RC=right canine; RPM=right premolar; RM= right molar.

Table IV. Metrical analysis of femurs of the Pallemalala bone collection. (SAP- Subtrochanteric antero-posterior and SLM- Medio-lateral diameter).

Specimen	SAP diameter (mm)	SML diameter (mm)	Femur-shaft index	Category
PLM-FE-01	24.18	30.70	78.76	Platymeric
PLM-FE-03	20.74	23.32	88.93	Eurymeric
PLM-FE-06	24.11	21.44	112.45	Platymeric

Fig. 4. Maxilla with calculus deposits with brown colour stains and periodontal disease.

Fig. 5. Male mandible indicated severe anterior teeth attrition.

DISCUSSION

Shell midden areas occupied a very important place in the archaeological context in any country. As proving it, a major archaeological breakthrough of human skeletal remain which was dated back to 4500 BC reported from Pallemalala shell midden site in the southern province of Sri Lanka (Somadeva & Ranasinghe, 2006). Before launched the proper excavation by the Post Graduate Institute of Archaeology, the shell miners were used to obtain shells for the lime manufacturing industry, and they accidentally discovered extremely fragmented osteological remains among shell heaps. These human skeletal remains were subjected to the present study. Several factors have contributed to the poor state of preservation of the osseous remains. The soil of Pallemalala has a high content of Calcium due to the high number of shells in the soil. Soil high in calcium will lead to lead to the breakup of bone. Calcium carbonate formed in high calcium soils occupies a large space than the crystals of hydroxyapatite, which is the basis of the inorganic component of bone. Its formation exerts internal pressure, which will result in the brittlement and cracking of bones. Breaking up of bones is also induced by the climate climatic changes of the area. By exposing climatic changes such as rain and sun alternatively, the bones become more liable to break. Poor preservation of bone can also be due to microbial decomposition. The soil of the Pallemalala has a PH of 7.83 leading to alkaline states of the soil. This type of soil encourages the growth of bacteria and yeast in abundance. Therefore, microorganisms may have invaded the bones destroying it normal architecture. All these factors have made limitations on the osteological study of skeletal remains leading to the loss of some evidence regarding the past population.

During sorting out these bony remains, differentiating animal bones from human bones was done mostly by observing of shapes, texture, and overall size of bones. However, proper differentiation could not be carried on smaller fragments, as there were not enough visible features on the bone fragments. Microscopic identification is the best-documented way of differentiating human and animal bones. The osteons in human bones are evenly distributed throughout the cross-section of bone, but in other mammals, the osteon tends to be aligned in horizontal layers (Mays, 1998).

With regards to the determination of the side of the bone, direct identification was not possible in many bones. This was because the prominent identification features were lost by fragmentations. To overcome this problem, comparing them with a contemporary skeleton was carried out as an

indirect method of site determination. The extreme fragmentation of bones caused difficulties in estimating the minimum number of individuals (MNI) at the site. The MNI is clearly equal to the number of individual skeletons when dealing with articulated skeletons. But for a mixture of fragmented bones such as Pallemalala series, it is difficult to determine MNI by that way. In this case count of the most abundant element, taking into account its anatomical frequency, give the MNI, which has contributed to the sample. The MNI for human skeletal remains at Pallemalala was 7 and this figure has been given by 3 bone elements. Therefore, accuracy for MNI is considered as high. The contributed elements for MNI were mandibles and temporal and occipital bones. Among these, the high accuracy of estimating MNI is taken by occipital bones, because the occipital bone is a non-paired bone, and the chances for occurring errors in estimating and counting MNI are low. In paired elements, MNI is generally the number of either left or right elements depending on the bone giving the highest frequency of occurrence. Chances for multiple errors in counting MNI is high in that method.

Considering the metrical analysis of the remains, lack of complete bones and excessive fragmentation of remaining bones have limited the availability of evidence and, thus the conclusion that we can derive regarding the ancient Pallemalala population. It was not possible to record important measurements that can be used to calculate various indices that will help to predict various shapes showing various among earlier populations. For example, since there were no landmarks preserved on the cranial bones, it was not possible to calculate cephalic indices. However, certain measurements could be obtained from mandibles.

Measurements of teeth are an important aspect needed for the present investigation. Several calculations were done using the measurements of teeth available in the sample; although such measurements were not possible in some teeth due to the presence of severe attrition on them. On taking measurements of postcranial bones, lack of complete bones was not a problem on calculating indices of four specimens. However, it was not possible to calculate the stature due to lack of complete long bones in the collection. The Pearson formulae can be applied on fragmented long bones to calculate the stature of the individual (Krogman, 1962). But in this instance, we could not be apply the Pearson formulae because these particular bony fragments were not from exact areas of the long bones where the Pearson formula could be used. Therefore. No detail about stature can be presented for the ancient Pallemalala population.

Methods customarily used in estimating age at death in adults skeleton include pubic symphysis morphology, palatal suture closure, rib end and morphology, tooth attrition, cementum incremental layers, dental microstructure and articular surface morphology (Mays, 1998). In the present collection except the evidence from teeth and only one ilium fragment, no other clues from bones could be gathered for the domination of age. Post mortem fractures and antemortem molar teeth loss were limiting factors in age determination using dental wear.

Pelvic bones give the best evidence for sex determination. As there were no pelvic bones available in the collection, the next best area, the skull was used to determine the sex. Complete skulls were also not available in the sample. Therefore, frontal, temporal, and occipital bones were used. In long bones, features such as prominent ridges were used to distinguish sex.

When considering paleopathological changes in the sample, overall, very few pathological conditions were observed. The great thickness, heavy weight and robust features of one cranial vault fragment may suggest a Paget's disease of the individual. Abnormal bone formation was seen in some specimens. However, teeth showed a variable amount of dental pathology. There was evidence of severe periodontal disease. Though caries were present in some teeth, their incidence was very low. Abscesses and calculus depositions, discoloration of teeth, and brown color stains on teeth were readily visible on the sample. Abscesses could be associated with caries, general periodontal disease or considerable teeth wear. Though calculus deposits irritate the gum and initiate periodontal disease, their presence brings some degree of immunity from caries. Anterior teeth loss was a significant feature of the specimens of this collection. This may be due to alveolar resorption by periodontal disease. In almost all teeth, severe wear and tear could be observed on anterior and posterior aspects. It could be postulated that this population has utilized their teeth for various domestic work such as making tools or breaking wood. Anterior teeth strongly suggest such abuse. Posterior teeth wear could occur mainly by dietary habits. The fact that most posterior teeth had severe attrition strongly suggests that the diet of this particular population contained coarse food items. The presence of oral pathology could reveal the chemical nature and texture of the ancient diet. A diet high in protein, calcium, and phosphate would result from an alkaline oral environment. This could result in the mineralization of plaque and deposition of dental calculus. Less severe caries suggested an influence of fluoride in the diet, which had properties arresting the carious process. Evidently, the Pallemalala people may have had dietary chemistry that was extremely basic; this may be due to high protein, fluoride, and calcium levels as a result of the consumption of meat, selfish and small sea fish.

CONCLUSION

The Pallemalala site in the southern coast unearthed prehistoric human skeletal remains from a shell midden for the first time in Sri Lanka. The collection represents 7 minimum number of human individuals and in gender determination, it was evident that the females accounted slightly higher percentage when compared to the males. The majority of the individuals were from the age group between 35-45 years. The anterior teeth wearing patterns were highly suggestive of the utilization of teeth for various domestic work such as making tools or breaking wood, whereas posterior teeth indicated excessive chewing of coarse foodstuffs. It was clearly evident that oral pathological lesions were higher than post cranial bone diseases. These pathological conditions and other observations such as the high consumption of meat, shellfish, and seafood with small sea fish exerted that the community may have had an extremely basic dietary chemistry, which is suggestive of high protein, fluoride, and high calcium intake.

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RESUMEN: Sri Lanka es una isla en la punta del sureste del subcontinente indio que procesa la evidencia esquelética más antigua del *Homo sapiens* anatómicamente moderno (37.000 AP) y la mejor secuencia de registros esqueléticos humanos en la región del sur de Asia. Agregando otro elemento a la lista, los restos óseos, que pertenecen a la cultura mesolítica, se encontraron en el vertedero de conchas de Pallemalala en el sur de Sri Lanka durante la exploración arqueológica científica realizada por el Instituto de Postgrado de Arqueología de la Universidad de Kelaniya, Sri Lanka. El objetivo del estudio fue determinar el número mínimo de individuos humanos, edad, sexo y condiciones patológicas relacionadas con la antigua comunidad Pallemalala. Para el análisis se dispuso de 426 fragmentos óseos. De esos, 233 huesos fueron identificados como huesos humanos que representan un número mínimo de 7 individuos. El resto de la colección se componía de algunos huesos de animales y especies de conchas. La comunidad estaba dominada por la población femenina. Las categorías de edad identificadas fueron alrededor de 20 años, entre 35-45 años y mayores de 45 años. Las lesiones patológicas encontradas fueron engrosamiento óseo, reabsorción alveolar, abscesos dentales, caries dental, pérdida de dientes antemortem, depósitos de cálculo y manchas de color marrón en los dientes. En cuanto al patrón dietético, era evidente que su dieta pudo haber consistido en alimentos toscos con una química dietética extremadamente básica.

PALABRAS CLAVE: Humanos; Restos óseos; Sri Lanka; Pallemalala; Vertedero de conchas.

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