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SOME PATHOLOGICAL CASES OF ANCIENT ANATOLIAN MANDIBLES

E. Alpagut, Ankara, Turkey

Arthritis is the most common pathological condition of the temporomandibular joint. In this condition, the pathological change seen in the bony surface of the condyle and glenoid fossa is a degeneration. In Anatolia, a case of bilateral osteoarthritis of the temporomandibular joint was found in an adult man of the Early Bronze Age (3,000 - 2,500 B.C.). Again in Anatolia, three other cases of osteoarthritis on the condylar process were found from the Neolithic (seventh to fifth millennium B.C.) and Chalcolithic (fourth millennium B.C.) periods. A mandible that belongs to the Byzantine period (fourth century B.C.), found in Anatolia, displays medium alveolar resorption. Detailed information on these cases was presented.

A CASE OF MEDIEVAL CHRONIC OSTEOMYELITIS

G. and S. Arnaud, Draguignan, France

Several sequelae of a chronic osteomyelitis have been noticed on the right tibia and left femur of a medieval 25 year old male. Though the morphologic and radiologic examinations gave rise to various hypotheses, the microscopic aspect of the longitudinal section offers a correct diagnosis: the presence of impostumated cavities, fistular courses and reactive hyperostosis. The histologic, microscopic and microradiographic examinations could not confirm this. The bone was deeply impaired by numerous canals drilled by invading and later resorbed mycetes (A. Ascenzi, Rome). Sections should be systematically made of all paleopathological bones for further macroscopic and microscopic examinations of the osseous tissue.

UN CAS DE MYOSITE OSSIFIANTE POST-TRAUMATIQUE DU HAUT MOYEN-AGE: PRÉSENTATION ANATOMO-RADIOLOGIQUE

C.A. Baud et R. Lagier, Genève, Suisse

Présentation d'un segment de fémur droit trouvé dans une tombe du Haut

Moyen Age et provenant d'un squelette adulte sans autre particularité pathologique. Une masse osseuse est accolée à la corticale, sur la surface antéro-externe. L'aspect macroscopique et l'image radiographique (en particulier après section longitudinale et transversale) permettent d'exclure une malformation, une tumeur, une ostéomyélite. L'étude histologique par micro-radiographie sur du matériel inclus en méthacrylate de méthyle amène à comparer la structure de l'os préexistant de l'os néoformé. Cette néoformation présente les caractères d'une ossification juxta-corticale post-traumatique (en général qualifiée de 'myosite ossifiante post-traumatique'). Ce diagnostic est assuré par la confrontation radiologique et anatomo-pathologique avec deux cas actuels (l'un d'évolution récente, l'autre d'évolution plus ancienne). Ce cas banal en lui-même illustre une donnée importante pour que la paléopathologie joue son rôle en anthropologie, en histoire, en archéologie et en médecine: il importe que cette discipline repose sur une analyse anatomo-pathologique stricte et spécialisée, confrontée aux critères diagnostiques et à la sémantique de la médecine actuelle.

STRUCTURE AND CHEMICAL COMPOSITION OF ANCIENT HAIR

D.A. Birkett, Cleveland, England

There has been little published on the application of modern techniques of hair analysis to the hair of ancient peoples. It has been our aim to see if the study of ancient hair by scanning electron microscopy and the estimation of the level of various elements in the hair is a practical procedure likely to be reliable enough to be of use in studying abnormalities. Samples of hair from various sources in the British Museum of Natural History in London were obtained. These included several specimens of hair from Egyptian mummies, Danish bog bodies, Romano-British and medieval English sources. Scanning electron microscopy revealed that most hairs had been attacked by fungi during the intervening centuries. Preliminary work on the chemical analysis of hair has shown element concentrations in the range found in modern hair. It would seem therefore that the techniques will be valid in the study of abnormalities in hair from archaeological sources.

PATHOLOGIE DENTAIRE DU NÉOLITHIQUE PÉRIGOURDIN

Ph. Brenot et M. Lorber, Bordeaux, France

La série néolithique d'Eybral Le Coux (Dordogne), tire son importance à la fois de la taille de sa population au sein d'une époque peu connue en Périgord, et de son originalité paléolithologique (groupe Isle-Dordogne) et paléopathologique (3 trépanés, dont une double trépanation aux dimensions importantes). Cette série peu homogène, en raison des conditions de fouille, est constituée d'une soixantaine d'individus. L'étude systématique de l'état et de la pathologie dentaire permet de la replacer dans le contexte des séries contemporaines du Sud de la France. Avec une forte usure et un faible pourcentage de carie, on retrouve les caractères des populations néolithiques. Cette étude permet de compléter l'abord de cette région où les populations néolithiques sont paradoxalement moins bien connues que celles du paléolithique supérieur.

PIED PLAT, PIED CREUX ET ÉPINE SOUS -CALCANÉENNE PALÉOLITHIQUE

V. Capecchi, Siena, Italy

L'auteur présente des squelettes de pieds paléolithiques (18,000 années A.C.), l'un masculin, et l'autre féminin, reçus par le regretté Prof. Parenti, de l'Institut d'Anthropologie de Pisa, pour l'étude des aspects pathologiques. Ils ont, en effet, une bien visible épine sous-calcanéenne: maladie très rare dans l'antiquité et presque inconnue chez les hommes préhistoriques. Au point de vue de la pathologie, ces observations dans des pieds creux sont très importantes, parce qu'elles démentent que cette affection du pied soit liée au complexe de pied plat, comme on le croit communément aujourd'hui.

PATHOLOGICAL CHANGES IN THE MORPHOLOGY OF THE YOUNG PALEOLITHIC SKELETAL REMAINS FROM STETTEN (SOUTHWEST GERMANY)

A. Czarnetzki (Tübingen, Germany)

Since the excavation of the Stetten I and II skeletal remains in 1931, there has been no full description of the pathology of these bones. The remains were found in an Aurignacian layer (Stetten I and **III**) or in burrowed layers (Stetten II). The pathological changes were demonstrated by slides and radiographs. The etiology of the pathologic features was discussed. It was also possible to look at the features on the originals.

POSSIBILITIES, LIMITS AND PROSPECTS IN PALEOPATHOLOGY OF THE HUMAN SKELETON

J. Dastugue, Caen, France

1. Possibilities. Paleopathology is not only a means to find ancient bone diseases: its possibilities are multiple. Within the medical field, paleopathological diagnosis extends to any disease of soft tissues that leaves even the lightest trace on bone. In addition, paleopathological data enable us to evaluate the so-called 'evolution' of human diseases. Beyond the medical field, paleopathology offers much evidence about ancient ways of life (e.g. cranial surgical practices, sick people's treatment, etc.).

2. Limits. Obviously, the possibilities of paleopathology are limited in many ways. First, the diagnosis itself is limited in many cases. Examples may be quoted, such as neoplastic lesions before they have reached macroscopic size, or syphilis, or Paget's disease, which, lacking serological data, cannot be diagnosed from anatomical changes only. On the other hand, paleopathology is often unable to give archaeologists certain important answers, for instance, to the question: Was this wound the direct cause of death?

3. Prospects. One may hope that the present boundaries of our science will be extended in coming years. This is possible in two ways, first by improving classical diagnostic methods so that they can be applied to new directions of research, and secondly by using new investigative techniques, such as paleoserology.

Overall, it seems to the author that paleopathological work should no longer consist of individual studies, but should be performed in collective programs.

PALEOPATHOLOGY OF THE PTOLEMAIC POPULATION OF DALHLEH OASIS, EGYPT

T. Dzierzykray-Rogalski, Warszawa, Poland

In 1977, the author took part in an expedition organised by I. F. A. O. (French Institute of Oriental Archaeology in Cairo) to Dakhleh Oasis in the Libyan desert. Investigation of bone material was undertaken in the neighborhood of Asel city and Qila el Dubbeh, a necropolis of the sixth dynasty. Among other materials, seventy one individuals from the Ptolemaic period that had been discovered in an old mastaba M II CD, were examined. The author estimated the age at death, sex, and pathological changes. Osteoarthritis was the most frequent pathological condition of this material. In four cases, it was possible to observe changes in the skull bones typical of leprosy.

OSTEOPATHOLOGY CAUSED BY WORK ACTIVITY IN EARLY EGYPTIANS

M. Fedeli, Rome, Italy and M. Masali, Turin, Italy

The effect of physical and work activity has been studied in an early Egyptian population, considering the following characteristics:

- 1) development of muscles of limbs and definition of somatic type according to possible work activity;
- 2) search for traces of bone wearing, typical of particular work activities, effects of weight carrying, etc.;
- 3) traumatic lesions related to work activity.

ANOMALY OR PATHOLOGY: THE STAFNE DEFECT AS SEEN IN ARCHAEOLOGICAL MATERIAL AND MODERN CLINICAL PRACTICE

M. Finnegan, Manhattan, Kansas and A. Marcsik, Szeged, Hungary

The high incidence of the Stafne defect found in Hungarian Avar and Plains Archaic populations has prompted anthropological inquiry into the usefulness of this anomaly/pathology in the description of earlier human populations. However, in order to treat properly its occurrence within and between population samples, it was first necessary to determine if the defect was an anomaly or pathology. To this end, data were obtained from field sites, museum collections and material previously reported in the literature. A total sample of 5,519 mandibles from archaeological sites produced 59 (1.069%) Stafne defects, while the clinical literature showed 126 cases from 2,2301 minimum observations reported (0.565%). Analysis of the reported clinical cases, where surgical procedures and histological examination of the contents were performed, suggests that the Stafne defect is an anomaly rather than a pathology, and that a descriptive differential diagnosis is easily made -- this is true in both clinical and archaeological materials. In addition, the relatively high incidence of the defect in some population samples (6.06% in Ujfehértó-Szeged, Hungarian Avar period) and its absence in many other population samples suggests the usefulness of this defect as a non-metric morphological trait in the analysis of biological distance between and among population samples.

MORPHOLOGIE MAXILLAIRE ET ANOMALIES DENTAIRES DANS LES ÉGYPTIENS DYNASTIQUES

F. Gabriele, Turin, Italy

382 crânes d'égyptiens adultes de la période dynastique, appartenants à la collection G. Marro, ont été étudiés en ce qui concerne les anomalies de développement et de structure des dents. Une documentation photographique et radiographique concernant les observations effectués sur les cas les plus intéressants a été rapporté.

POROTIC HYPEROSTOSIS IN SARDINIA

F. Germanà, Sassari, Italy and A. Ascenzi, Rome, Italy

Porotic hyperostosis is a general paleopathological term that includes a wide variety of hematological disorders with the common finding of medullary hyperplasia. The latter condition, particularly during childhood, induces bone changes by increasing the capacity of the bone cavities to hold the excess of hematopoietic marrow. In Italy, porotic hyperostosis presents a marked problem, because it includes thalassemia, a group of disorders without archaeological remains to provide a clue to its origin. The island of Sardinia is a region in which porotic hyperostosis has been investigated very little, although there is now a very high incidence of thalassemia there. This paper presents and evaluates the results of an archaeological investigation of skeletal remains found in Sardinia, which are relevant to porotic hyperostosis. Our examinations were carried out on bone specimens from two different sites. The first group consisted of incomplete skulls and fragments of cranial vaults discovered in 1971 in a peculiarly Sardinian type of prehistoric house called 'domu de janas.' The house had been investigated in the rock at S'Isterridolzu (Ossi-Sassari). All the bone material, remnants of more than thirty individuals, was archaeologically related to the Bonnanaro type going back to the Bronze Age, i.e. about 1,500 B.C. The second group of skeletal remains was discovered in 1971 during an excavation in the courtyard of the building at 119 Umberto Avenue in Sassari. There, the human skeletal remains were mixed with bones of animals (including the Prolagus sardus), and they revealed features of the Monte Claro neolithic civilisation. The paleopathological findings are described in detail in order to establish, even though approximately, the significance of the bone changes. The limits to an exact identification of the process are also examined, this being due to the incomplete suitability of the bone material.

ÉLÉMENTS DE PALÉOPATHOLOGIE TRAUMATIQUE DANS UN DOLICHOCRANE PRÉHISTORIQUE SARDE DE SERRA CRABILES (SENNORI-SASSARI)

F. Germanà, Sassari, Italy

L'auteur examine le reste crânien découvert dans une petite grotte artificielle du type 'domus de janas' de Serra Crabiles (Sennori-Sassari) à 248 mètres. Sur le plan morphométrique il s'agit d'un dolichomorphe, en vue supérieure ovoïde, encéphalique, dolicho-chamae-métrico-crânien, sténométope avec des crêtes frontales intermédiaires. Il est caractérisé par de discrètes saillies des arcades orbitaires, un front fuyant et un occiput cunéiforme, à l'inion placé immédiatement au-dessus du plan de Francfort. La face est microscopique, euryène, chamaeconque à gauche, mesorhine, orthognate à tendance phénozygüe. L'examen radiologique a montré une vaste fracture linéaire, qui traverse toute l'épaisseur du crâne, dans sa portion fronto-pariétale de gauche. L'auteur suppose qu'il s'agit d'un choc direct au moyen d'un objet contondant, il devait s'agir d'un objet à forme de faux. L'individu de Serra-Crabiles subit le choc crânien longtemps avant sa mort, peut-être en âge enfantin; il dut sa longue survie au fait qu'à l'entité de la blessure osseuse ne coexistent d'aussi graves lésions des méninges et de l'encéphale.

SOME CASES OF PATHOLOGICAL CHANGES FROM NEOLITHIC AND MEDIEVAL CEMETERIES IN POLAND

J. Gładkowska-Rzeczycka, Białystok, Poland

This report presents a brief outline of paleopathology in Poland, dealing strictly with material from Polish areas. Several interesting exhibits from the Białystok Museum of Paleopathology are described. Among others, there are cases of exostoses multiples/chondrodysplasia hereditaria deformans, achondroplasia/achondroplastic dwarfism, a skull with prematurely closed sutures, a case of leprosy, ameloblastoma, osteitis, and other cases in which the etiology of changes was not established.

UN CAS DE PIED ÉQUIN DANS UNE MOMIE ÉGYPTIENNE

R. Grilletto, Turin, Italy

Un cas de pied équin dans une momie égyptienne de la nécropole de Sacara

est présenté, et des corrélations avec d'autres cas d'équinisme sont faites. L'étiologie de cette malformation est également considérée.

FEATURES OF OLD AGE IN THE SKELETON OF A YOUNG FEMALE OF MEROVINGIAN TIMES

R. Hahn and A. Czarnetzki, Tübingen, Germany

A moderately well preserved female skeleton was found in a Merovingian burial place called Neresheim in southwest Germany. The stage of suture closure indicated a person who died at an early adult age. Through preparation, some features were observed that did not agree with the stage of suture closure. The macroscopic features and radiographs were demonstrated. Possible causes for the differences between suture closure and the other observed features were discussed.

MUMMIES THAT I HAVE KNOWN: A PEDIATRICIAN'S VENTURE INTO THE FIELD OF PALEOPATHOLOGY

P. Lewin, Toronto, Canada

A charter member of the Paleopathology Association, the author recalls his initial work on the electron microscopy of ancient Egyptian skin. Since then, he has been involved in all the major autopsies of the Paleopathology Association, and demonstrates some of the interesting histological findings. Lastly, he describes the use of computerized axial x-ray tomography in medical archaeology, a technique that may revolutionize the examination of preserved ancient man without physical destruction.

THE BACKBONE OF EARLY EGYPTIANS AND THE 'RACHIGRAM' METHOD

M. Masali, R. Grilletto, T. Cordero and R. Blanchietti,
Turin, Italy

The study of the vertebral column as a whole is quite difficult and frequently impossible for paleoanthropological studies, or it requires a huge amount of measurements that give little morphologic and geometric information. The 'rachigram', that is, the geometric reconstruction of the sagittal section of the vertebral bodies, may give some opportunities for the investigation of

postural variability and possible pathologic variations. An attempt was made to investigate the possibilities of the method with an early Egyptian sample.

DU DIAGNOSTIC DES AMPUTATIONS EN PALÉOPATHOLOGIE

F. Metz and E. Ardila, Caen, France

L'amputation se définit comme la section d'un membre au travers d'un de ses segments. Il ne s'agira, ici, que d'amputation traumatique ou chirurgicale, en excluant les 'amputations' spontanées ou congénitales.

1. Le diagnostic positif d'une amputation est: a) ante mortem: aspect macroscopique: une surface de coupe irrégulière, compact, avec des signes de réparation (exophytose débordant dans le canal médullaire), des signes d'ostéite remanient parfois l'extrémité du moignon, la radiographie authentifie ces aspects; b) post mortem immédiate ou ayant précédé de peu le décès: diagnostic très difficile: la surface de coupe est nette, régulière, sans réparation avec parfois des traces de sciage.

2. Le diagnostic différentiel se fait avec: a) le rare syndrôme des sillons congénitaux; b) les agénèses des os longs; c) les arthropathies nerveuses; d) les pseudoarthroses; e) les sections diverses: cassures, crémations.

3. Cinq observations s'étendant, chronologiquement, de l'époque préhistorique à l'époque mérovingienne, nous montrent toutes les difficultés et les hésitations du diagnostic.

En matière de conclusion, de très nombreux cas d'amputations restent à explorer dans nos collections malgré les difficultés inhérentes au diagnostic.

THE SCORING OF DEFECTS OF THE PROCESSUS ALVEOLARIS

D. Muller and W.R.K. Perizonius, Utrecht, Holland

Scoring methods of some osseous defects of the processus alveolaris were presented: interalveolar defects, alveolar resorption, interradicular resorption (furcation involvement), fenestration and dehiscence. Periodontal disease and physiological resorption are considered the main etiological factors in the development of interalveolar defects, alveolar resorption and interradicular resorption. Fenestration and dehiscence seem to be a morphological characteristic with a possible genetic background. Interalveolar defects are denoted by the location of cortical plate destruction in the area. Alveolar resorption is scored by measuring the distance between the cemento-enamel junction and the crista alveolaris. Interradicular resorption is measured by a periodontal probe: four stages are distinguished. Fenestration and dehiscence scoring follows a given definition, and lengthwise measurements are made. The methods were developed in studying the early medieval skeletal material of a Dutch Carolingian town (Dorestad, \pm 800 A.D.).

COMPUTERIZED AXIAL TOMOGRAPHY - A MODERN METHOD OF MEDICO-ARCHAEOLOGICAL INVESTIGATION OF EGYPTIAN MUMMIES

W. Pahl, Tübingen, Germany

These investigations were carried out on two Egyptian mummies from the collection of the Institute of Anthropology and Human Genetics at the University of Tübingen, using the body-scanner 'Ohio Nuclear Delta Scan 50.' X-ray investigations had been made earlier. As the preliminary results indicate, the three-dimensional perspective of CAT-scans of mummies provides more extensive and precise information (quantitatively and qualitatively) than conventional x-rays. Comparable views of the human body are only possible with classical radiological techniques when anatomical sections have been prepared. The higher contrast resolving power of CAT-scans offers particularly promising results in soft-tissue localisation and diagnosis of mummified subjects. The exact localisation of archaeological artifacts is an additional benefit of this method. The method could be of significance in localising and recognising pathological processes -- also in skeletons. In this respect, the technical possibilities of the CAT-scanner are useful: the region of interest can be located by scanning and density measurements can be carried out. Additional possibilities are provided through calculations of area, measurements of distance and enlargements of small areas. The examination of mummified bodies without destruction of tissue and wrappings could be undertaken if reliable standard values on the behavior of normal and pathological dry tissues exposed to CAT rays were available. First investigations using filler and concrements are in progress. Finally, a head belonging to the above mentioned collection was presented. This subject is still under investigation, because of a gap assumed to be a trepanation. Inside the right sinus cavity there is a well-defined opacity that, according to density measurements, might possibly not be artificial. The assumption that the opacity is of a pathologic nature is supported by the intact state of the medial wall of the sinus cavity, as well as the upper jaw bone.

PATHOLOGIE ORALE DANS UNE POPULATION ÉGYPTIENNE DYNASTIQUE

A. Peluso, Turin, Italy

382 crânes égyptiens adultes de la période dynastique, appartenant à l'Institut d'Anthropologie de l'Université de Turin, ont été examinés quant à la pathologie orale. Une nombreuse série de diapositives de tumeurs mandibulaires, de caries, et surtout d'usure dentaire, qui est la première cause d'abcès apical et de dégâts à l'articulation temporo-maxillaire ont été recueillies.

PALEOPATHOLOGICAL ASPECTS OF MEDIEVAL VERTEBRAL REMAINS

R. Perrot, A. Morin, and G.-P. Gonon, Lyons, France

The authors describe spinal column remains from three French medieval necropolises: Nérís-les-Bains (Allier), Curtil-sous-Burnand (Doubs) and Roanne (Loire). The pathology consists of: congenital and developmental anomalies (L2-L3 block, L5 half-sacralisation, spinae-bifidae, asymmetry of thoracic vertebrae and sacrum, scoliosis), degenerative pathology (classical arthrotic changes all along the spine, predominantly in cervical, thoracic and lumbar vertebrae), and traumatic lesions (a well-healed fracture of the sacrum and coccyx). Arthritic lesions, infectious diseases and malignant neoplasms have not been found by the authors.

A MEDIEVAL CASE OF PSEUDOARTHROSIS OF THE NECK OF THE THIGH BONE (SAINT-JUST, LYON, FRANCE)

R. Perrot, Lyon, France

The author describes the right femur of a sixty year old woman from the Merovingian necropolis of Saint-Just (Lyon, France). The bone shows a fracture of the proximal (upper) end, involving the neck and the greater trochanter (near the insertion of the gluteus minimus) without healing. A pseudoarthrosis developed afterwards between the neck and the other part of the thighbone. This case, well-known in modern orthopedic surgery, seems to found rarely in paleopathology literature.

PALEOPATHOLOGICAL CHANGES OBSERVED IN A CHRISTIAN POPULATION FROM DONGOLA (NUBIA)

E. Prominska, Warszawa, Poland

Bone remains from tombs discovered in two churches in Dongola were examined. The tombs dated to the seventh - thirteenth centuries. Altogether, from eighteen tombs, there were eleven males, six females and four children. Pathological changes in the bones were very frequent. Various kinds of spondylitis were the most frequently noted types of disease. These changes were found in half of all males and two thirds of all females examined. Osteoarthritic changes were also very frequent. These were

found in one third of all males and half of all females. Also observed were chronic dental abscess and traumatic lesions (fractures) The author compared the data observed in the Christian population from Dongola with the frequency of pathological conditions in other populations of Nubia and Egypt.

LES ALTÉRATIONS DENTAIRES DE L'HOMME DE BROKEN-HILL

P.-F. Puech, Marseille, France

Le premier homme porteur de caries dentaires a été découvert en 1921 par les ouvriers qui exploitaient un gisement de zinc dans le nord de la Rhodésie à Broken-Hill (Zambie). Ils mirent au jour un crâne dont la plupart des caractères, ainsi que le contexte archéologique et géologique, en font un prédécesseur de l'homme de Néandertal age de 110,000 ans environs. Ce fossile est de plus surprenant car il est atteint de polycaries, maladie moderne ne s'étant répandue que beaucoup plus tard, d'une mastoïdite et d'un trou rond à la tempe gauche.

Caractères morphologiques de la machoire supérieure, du palais et des dents. L'arcade alvéolaire maxillaire est de form upsiloïde et possède au niveau molaire des hyperostoses très importantes sur les faces vestibulaires (comme dans le cas de l'homme de Tautavel ou de Petralona) et des hyperostoses légères et irrégulières au niveau du palais. Toutes les dents ont évoluées et sont disposées très régulièrement sur l'arcade, mais leur détérioration par la carie est très importante, en dehors de cinq dents (12 est absente, 13 et 14 sont fracturées et 11 et 21 sont très usées) elles sont toutes atteintes par la carie d'origine interdentaire. La recession alvéolaire pathologique frappe l'ensemble de la dentition avec notamment une lyse osseuse due à des abcès dentaires au niveau de 22, 26, 27 et 28.

L'usure dentaire. L'usure de l'émail et/ou la dentine exposée varie pour l'arcade dentaire, cet aspect de l'usure est une précieuse indication de la distribution et de la valeur relative des forces auxquelles ont été soumises les dents de l'homme de Rhodésie. Les dents antérieures ont une usure beaucoup plus importante que celle des dents postérieures, celle-ci est plane pour les molaires et prémolaires alors qu'elle est convexe pour les incisives. A partir des théories concernant ce type d'usure nous pouvons imaginer que l'homme de Broken-Hill avait l'habitude de peler la couche superficielle de certaines racines et de jeunes pousses en tirant celles-ci de la bouche vers l'extérieur à travers les incisives supérieures et inférieures comme le font certains singes d'Afrique. La sévère usure ainsi provoquée au niveau du bloc antérieur ne permettant plus l'effet de coupe qu'au niveau du rebord des dents postérieures, l'efficacité de l'appareil manducateur

s'est trouvée considérablement réduite obligeant notre homme à se contenter d'une alimentation molle ou composée de volumes réduits.

Aspects microscopiques des surfaces de l'émail. Le rôle des caractéristiques alimentaires a été très souvent évoqué depuis que Butler en 1952 a déduit de la disposition des facettes d'usure des surfaces triturantes des couronnes le détail des déplacements des dents. La consistance du matériau ingéré étant un facteur déterminant du comportement oral, les nombreuses particules abrasives contenues dans l'alimentation de l'homme préhistorique ont rayé la surface des dents qui portent ainsi les stigmates du passé fonctionnel; c'est pourquoi nous présentons dans cette étude la photographie au grossissement 50 des surfaces de l'émail.

Conclusion. La cause généralement admise des polycaries de l'homme de Broken-Hill est qu'il ait abandonné la chasse pour se contenter de végétaux et de petites proies lors de son repli en forêt tropicale. L'étude des stries des surfaces dentaires confirme cette opinion. Il semble possible, étant donné le point de départ interdentaire des polycaries et l'absence de traces laissées par l'usage du cure-dents, d'ajouter que l'homme de Broken-Hill aurait permis le développement de ces lésions en perdant la notion d'hygiène dentaire alors que l'emploi du cure-dents était déjà largement répandu 180,000 ans plus tôt (Tautavel, Atapuerca).

DEUX CAS DE SPINA BIFIDA DANS LES MOMIES ÉGYPTIENNES

E. Rabino Massa, Turin, Italy

Deux sujets avec l'ouverture de l'arc postérieur des vertèbres de la région lombo-thoracique, connue sous le nom de 'spina bifida' sont présentés. On a aussi observé un cas qui présente l'absence complète de l'apophyse épineuse et des lames seulement au niveau des vertèbres thoraciques d'un rachis dont toutes les autres vertèbres étaient normales.

SOME SKELETAL CHANGES IN PRE-EUROPEAN CONTACT AUSTRALIAN ABORIGINES

A. T. Sandison, Glasgow, Scotland

Before the coming of the European, the indigenous inhabitants of Australia were an efficient hunter-gatherer society with paleolithic technological capacity

and an unusually rich culture encompassing the visual arts, music and mythology. Social relationships were complex. The aborigines were able to survive and thrive in comparatively inhospitable environments, including some so arid that white men rapidly perished there. Genocide led to the complete extinction of the Tasmanian aborigines and virtual destruction of those in Victoria. In the Northern Territory and West Australia there are still substantial numbers with smaller populations in the remaining states. Few, if any, now live in the old fashion, and desert nomadic groups may play pop music on transistor radios. Thus the pattern of disease and state of health in contemporary aborigines are of interest, but much different from those in the pre-contact period. An obvious example is the absence of dental caries in the pre-contact skeletons and a rapid increase in incidence when white man's 'tucker' replaced the old diet. Among the conditions noted were congenital anomalies including vertebral fusions and infrequent hare-lip and cleft palate. The etiology of 'boomerang tibia' is unknown. Healed leg bone fractures were common; there are rare examples of survival after comminuted femoral fracture. Occasional knee arthrodesis was seen, but no classical osteomyelitis. Osteoarthritis was common. There was no evidence of leprosy, but treponarid (possibly a form of non-venereal syphilis) was fairly common, except apparently in tropical Queensland.

A RADIOLOGICAL STUDY ON SKULL AND SPINE PATHOLOGY OF ANCIENT EGYPTIANS

A. Sicuro, G. Giacobini and C. Torre, Turin, Italy

An investigation was carried out on the skull and vertebral column pathology of the early Egyptians (more than 1,000 subjects) from the G. Marro collection at the University of Turin. Some peculiar features were observed. In three subjects, morphological and radiological findings typical of ankylosing spondylitis were seen. As far as skull pathology was concerned, a few subjects showed multiple areas of osteolysis, which may be partly attributed to neoplastic (multiple myeloma) and partly to unclassified chronic diseases.

PALEOPATHOLOGY OF THE LATE ROMAN - BYZANTINE CEMETERIES AT SAYALA

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The paleopathological pattern of the collective burial complexes C I-III at

Sayala shows a clear predominance of traumatism, attaining the greatest frequency and intensity in the C III complex. Fractures of long bones, compressive fractures of skull diploe and of vertebrae, impressive fractures of skull and evidence of cuts and stabs were most common. Almost all these changes showed excellent healing. The antebrachium, mostly left, and the frontal and parietal regions were the most commonly afflicted. Adult males were more often wounded than females or immatures. These findings suggest that fighting was the major cause of the traumatism. It conforms to the anomalous demographic structure of the C I-III burial complexes, showing absence of children up to nine years of age, and underrepresentation of women. Among other diagnoses, degenerative-productive changes occurred often, especially osteophytosis and arthrosis. They prove, together with ample evidence of functional overload of both extremities, the extensive wear and tear on the organism, connected probably with military actions. Inflammations were present only as rare consequences of traumatism. Congenital anomalies, senile changes, tumors, and other pathologies were found less often. A more regular paleopathological pattern was revealed in the contemporary cemetery N, located on the opposite, west, bank of the Nile, where the demographic structure also showed the expected distribution of age and sex categories.

LA PROBLÉMATIQUE D'UNE CLASSIFICATION A L'USAGE DE L'OSTÉO-ARCHÉOLOGIE PATHOLOGIQUE

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Dans le domaine particulier de la paléopathologie que constitue l'ostéo-archéologie pathologique, un problème s'impose actuellement aux chercheurs: celui de la classification des lésions observées. L'analyse critique d'une communication effectuée par le Pr. Grmek à la Société Française d'Histoire de la Médecine et des travaux poursuivis par les paléopathologistes américains et anglais a permis d'élaborer un nouveau mode de classification. Celui-ci repose sur l'établissement, pour chaque squelette analysé, d'une fiche signalétique individuelle standardisée. Afin de préciser l'état de conservation du spécimen, l'auteur propose, à partir du nombre d'os disponible, un indice de conservation permettant de relativiser la valeur des étiologies retenues pour l'interprétation des processus pathologiques. La mise en fiche du squelette No. 1 de l'abri de Cro-Magnon illustre les possibilités et les avantages de cette méthode.