INTERNATIONAL COLLOQUY ON THE ORIGIN OF SYPHILIS IN EUROPE BEFORE OR AFTER 1493, HELD IN TOULON (FRANCE), 1993

The Archaeological Centre of Var in Toulon in collaboration with the Laboratory for Anthropology and Prehistory of Western Mediterranean Countries of the University of Provence in Aix-en-Provence organized under the guidance of the President of the Organisatory Committee J. -P. Brun, President of the 24-member Scientific Committee Y. Coppens and General Secretaries O. Dutour and Gy. Pálfi an international colloquy on the origin of syphilis in Europe before or after 1493 in Toulon (France) on 25th – 28th November 1993. The meeting was attended by about 70 specialists, half of them from France, half from 11 other European countries, and also from the USA, Canada and the South African Republic.

The agenda was divided into 6 lecture sessions, 4 round tables and a poster session. The first session demonstrated a recent case of secondary syphilis, radiographic aspects of acquired syphilis and of congenital syphilis and contrasting epidemiology of African endemic treponematoses in savannah (bejel) and forest (yaws) as present clues for past treponematoses.

The second section concentrated on the relation of treponema to bone aimed at extension of diagnosis from present experience to past cases. Thus anatomical bases of diagnosis of osseous syphilis, comparative histopathology of syphilis in prehistoric bones, and analysis of populational occurrence of distinctive features of syphilis (Todd collection), yaws (Guam) and bejel (beduins from Negev, Israel) were presented. Further, the course of macroscopic syphilitic lesions in bones from patients of some Italian hospitals believed to have died of syphilis, differential diagnosis of rhinomaxillary changes in syphilis and yaws versus other causes (leishmaniasis, cancrum oris, malignant tumours, lepra, tuberculosis) and anatomical and histological features of bejel studied in a large sample of 19th – early 20th century Bedouin long bones, were demonstrated.

The mostly expected third session gathered evidence in favour of the hypothesis for the presence of syphilis in Europe before 1493. It was recently found and described in 5 sites, the most crucial one which caused the convocation of this meeting was the finding of a 7-month-old foetus with morphological changes suggesting congenital syphilis in the pelvis of a relatively aged, 50-year-old female, burried in tomb No. 1 at Costebelle near Hyres, department of Var (France). It was discussed from different points of view. Firstly, the archaeological history of the site and dating of its small cemetery into the 3rd – 4th cent. were outlined. Secondly, the survey of palaeopathological findings of 26 individuals from the small cemetery of the site (osteoarthrosis, intervertebral osteochondrosis, enthesopathic hyperostosis, fracture, osteoma, periostitis and activity-linked alterations), was presented. The third paper concentrated on the description of the macroscopic pathological changes (periostal appositions, lytic lesions, loss of metaphyseal substance and subperiostal unsticking of para-diaphyseal calcifications resembling subperiostal haematomas). The last contribution concerned differential diagnostic possibilities (scorbut, tuberculosis, non-veneral treponematoses). All were refused in favour of congenital syphilis.

The other cases with newly found evidence for syphilis were a young adult female from the medieval Blackfriars site at Gloucester (England), four adults from the Cemetery of the church of St. Margaret in combusto, Norwich (England) with A.D. 1468 as a terminus ante quem, 47 individuals out of 272 with symptoms which might be (some were decidedly not) due to treponematoses (but not necessarily to syphilis) from Metaponto (South Italy, 580 – 250 B.C.), and two femoro-tibial dystrophies found in the site of abbey St. Géry at Mont-des-Boeufs in Cambrai dated before 1543.

Other papers dealing with syphilis in the Ancient World brought either still less conclusive evidence for the time before 1493 or they were dated after that date. Thus the Roman time skull from Arles (France) showing an osteoperiostitis of the frontal suggesting caries sicca, destruction of some parts of the nasal corridor and perforations of the palate was either the result of non-specific osteitis or of syphilis. The mummy of the noble Maria d'Aragona (1503 – 1568) showed asymmetric tumefaction of lower extremities and several ulcers, in one of which Treponema pallidum was identified by immunofluorescence and electron microscopy. This was the first proof of this pathogene in ancient human tissue. The skeleton of an adult male from Roca Vecchia (Melendugno, South Italy) dated from mid – 14th to the beginning of 16th cent. showed destruction of the frontal region and destruction with periostal reaction in long bones of extremities, suggesting treponematoses, probably syphilis. In the skeletal remains from South Hungary only one case of probable syphilis (not checked histologically) dated to the Middle Ages was reported. The first written reports on syphilis in the Baltic countries, Poland and Finland started in 1493. In palaeopathological material till the 15th cent. A.D. no cases were detected, while from the 16th cent. onwards they became numerous in urban cemeteries. One male skeleton from the medieval series from Brenda, the Netherlands, had a skull lesion and many of the postcranial bones affected with periostal reactive bone and several large abscesses, but neither the diagnosis nor the dating were specified. Large scale palaeopathological studies of the remains of Ancient Egyptians did not reveal any convincing evidence of syphilis.

In contrast with this rather uncertain situation concerning pre-Columbian syphilis in Europe, in the New World, as was shown in the fourth session, osseous treponematosis appears to be an ancient and ubiquitous disease. Some findings recall yaws and treponarid, others, as a cranium dated by mass spectrometry at 2760 ± 60 years B.P. from the Gabriola Island, Brit. Columbia, showed a clear caries sicca, pathognomic for syphilis. Endemic treponematosis was shown also in pre-Columbian North Carolina ossuaries, in a Caribbean village, in a population of the Cape region of Baja California, etc.

The fifth session concentrated mostly on historical accounts on syphilis and syphilitics in Europe since the 15th cent. A.D., dealing with moral attitudes to the disease, the history of its treatment, notions of epidemy and contagion in social behaviour and with the opinions of the medical poem of Fracastor (1530) on the origin, treatment and other aspects of syphilis.

The sixth session entitled "Theories and controversies" brought on one hand arguments for the validity of the theory of the American origin of treponemal infection (refusing the newly published data because of their problematic dating or diagnoses), on the other hand a serological argument against the American origin of syphilis based on the rarity of positive reaction in unmixed populations of remote areas of the Americas, contrasting with their abundance in tropical Africa. Another paper argued for the existence of non-veneral treponematosis in pre-1492 southeast North America based on the absence of evidence for its congenital transmission. The program was complemented by a review of the development of A. T. Cockburn's ideas about the origin and course of treponematoses with reference to the progress made in the last 40 years.

The first round table dealt with diagnostic problems of syphilis and other treponematoses in ancient bones. Some authors even denied the possibility of proving treponematoses according to gross morphology only. The diagnosis is acceptable if supported by radiography, microscopy or modern biological methods. Discussing possibilities of discerning different clinically known forms of treponematoses, most authors agreed that osseous changes in yaws, bejel and veneric syphilis cannot be distinguished. Even congenital syphilis was not accepted unanimously as a specific proof for syphilis.

The second round table discussed recent experience with treponemas as clues for the past. No microbiological or immunological method can distinguish between their forms causing clinically different pictures. They cannot be considered as three distinct kinds. Modern immunological reactions are satisfactory for the diagnostic of treponematosis in living subjects. It is however not certain if an extract from a bone can preserve the tridimensional protein yielding specific reaction for a treponematosis. A sound evidence can be gained only by fraction of DNA.

The third round table compared the epidemics of syphilis in 1493 with nowadays epidemics of AIDS. The recently occurring picture of quick and very severe "malign syphilis" in patients with combination of syphilis and AIDS recalls of the description of syphilis in 1493 which after some decenia changed to its "classic" chronic course. Was it also caused by some immunodepressor? Or was it due to the change of a non-veneral to a veneral form?

The fourth round table aimed at syntheses of new data to new theories. They were, however, not reached unanimously, and different speakers sticked to their opinions. Most of them seem to accept the unity of treponemas in contrast to their diversity. Several authors argued for the recognition of the existence of at least treponematoses in Europe prior to Columbus (if only its veneral form can penetrate the placental barrier, then also of syphilis). Proofs of the presence of treponematoses in the Americas prior to Columbus were accepted by the majority of the participants.

A few posters (e.g. on syphilis in Ancient Poland, on treponematoses in recent Africa, etc.) and a small exhibition of the Costabelle find complemented the program.

The meeting was closed by an excursion to the town of Hyres. An exhibition on the Russian ship from the time of Catherine the Great, wrecked against the nearby island's rock, and the site of the Ancient Greek emporium Olbia, on the edges of which in Roman time a villa with a cemetery was investigated (yielding the finding of Costabelle) were visited.

Very few scientific meetings can boast with such a perfect organization and excellent hospitality. Moreover, all papers, posters and discussions are intended to be published as Proceedings of the Congress in a year's term by the Archaeological Centre of Var.

Eugen Strouhal

WORKSHOP ON DENTAL ANTHROPOLOGY IN WEIMAR, 1993

The Working group for palaeoanthroplogy and praehistorical anthropology of the German Gesselschaft für Anthropologie organized under the guidance of Maria Teschler-Nicola a Workshop on Dental Anthropology, its possibilities and limits, in the Thüringische Landesamt für Archäologische Denkmalpflege in Weimar from 25th – 30th October 1993. It was attended by about 50 participants from Germany, Austria and Switzerland together with two representatives from the Czech Republic and one from Norway. Together with physical anthropologists also stomatologists took an active part in communications and discussions aimed at mutual understanding of different terms and concepts.

The program was divided into 6 thematic sections. The first was devoted to the basics of the dental science, including anatomy and morphology (J. Türp), micromorphology of the enamel (R. J. Radlanski), and taxonomical analysis of the enamel prisms contour at the transition of hominoids to hominids (M. Bujati – Narbeshuber). The second section concerned developmental disorders (K. Alt). The third section offered a survey on palaeoanthropology of teeth (W. Henke). The fourth section comprised pathology and epidemiology, including dental caries as an interdisciplinary problem (N. Baum), sequelae of the caries (granuloma and cyst, K. Alt), paradontopathies (T. Strohm, read by K. Alt) and palaeopathologically proved tumours in the jaw region (E. Strouhal). The fifth section on nutrition, age and attrition included a survey on nutrition in praehistory from the archaeological point of view (Ch. Willms), trace element analyses of the enamel (G. Grupe) studies on attrition of permanent (A. Czarnetski) and of deciduous teeth (T. Knoll and M. Kunter), an analysis of the temporomandibular joint from anatomical, functional and pathological aspects (J. Türp, K. Alt) and an account on artificial changes in human dentition (K. Alt). The sixth section discussed age and sex features. It included sexual diagnosis according to dental measurements (M.Teschler-Nicola), methods for sex determination of subadult individuals according to dental measurements (H. Prossinger), dental eruption order (M. Dokládal), age determination of adults according to dental features (F.-W. Rösing), degenerative changes in the dental substance (T. Solheim), degenerative changes in the dental fixing apparatus (T. Strohm, read by K. Alt), ethnic dental morphologic and metric differentiation (S. Schnutenhaus) and family analysis in prehistoric populations (K. Alt). Each presentation was followed by vivid discussions for which sufficient time was reserved. The proceedings will be published by the Quintessenz Verlag.

The last day of the meeting was devoted to an excursion to the Homo erectus site Bilzingsleben, where its excavator Dietrich Mania acquainted the participants with the site and the newest findings of skeletal remains, tools, and other cultural and natural features.

Eugen Strouhal

THE Vth SYMPOSIUM "GROWTH AND ONTOGENETICAL DEVELOPMENT IN MAN"

The Vth international symposium "Growth and Ontogenetical Development in Man" took place on September 2 – 3, 1993 in connection with the XIXth Congress of Czech and Slovak anthropologists. It was devoted to the topic of "Applied anthropometry in medicine" and dedicated to Dr Aleš Hrdlička as a commemoration of the 50th anniversary of his death (September 5th, 1943). The symposium was organized by the Anthropological Institute of the Faculty of Natural Sciences, Charles University in Prague, and by the Czech Anthropological Society.

The first day of the symposium focused mainly on the problems of craniofacial anthropometry, with special concern for its use in plastic surgery. Besides a historical survey of the development of anthropometry, papers were presented on its past and present use in medicine, together with a prognosis of its ever increasing importance. Several contributions dealt with the application of cephalometry in treating patients with various types of facial palatal cleft, lesions, asymmetries, etc. In this context, the lecture of Dr. Ngimo from Singapore plastic surgery clinic was of particular interest. Also the paper presented by Professor Ward from Indianapolis was very interesting, dealing with the use of craniofacial anthropometry in medical genetics. The possibilities of distiction of various syndroms and diagnosing with the help of anthropometry, and consequently its use in preventive care, were also discussed.

Another interesting point is the cephalometric proof of hypertelorism and other morphometric anomalies in new-born children whose mothers make long-term use of antiepileptic drugs.

Besides the above mentioned contributions, the first day of the symposium included papers on the use of anthropometry in diagnosing and checking up post-operation condition of children's craniosynostoses, in estimating the degree of the patients' affection with cystic fibrosis, with various types of bone dysplasia, etc.

The second day of the symposium was marked by a prevalence of lectures dealing with the growth and development of healthy children and by changes in adult populations. The summarized results may be used as a growth – development norm, i.e. for the evaluation of the individual condition in relation to the average population.

In this context, M. Prokopec from Prague delivered one of the most interesting lectures, explaining, mainly to the foreign participants in the symposium, the principles of the monitoring of body heigth, weight, normal chest circumference and braincase circumference in Czech and Slovak children and youth, carried out regularly every ten years already for the fifth time. This contribution was followed by several reports of the first results from the latest, i.e. the fifth research in this series, dating of 1991.