Clinical Pathology
of Fibro-Osteo-Cemental Lesions
in the Cranio-Facial and Jaw Bones

A New Approach
to Differential Diagnosis

281 figures and 24 tables, 1983

Karger


Miro Makek

Privatdozent, MD
Institute of Pathology of the University of Zrich
Zrich, Switzerland

National Library of Medicine, Cataloging in Publication
Makek, M. (Miro)
Clinical pathology of fibro-osten-cemental lesions in the cranio-facial and jaw bones:
a new approach to differential diagnosis
1. Facial Bones - pathology 2. Fibrous Dysplasia of
Bone - pathology 3. Cementoma - pathology 4. Jaw -
pathology 5. Osteoma - pathology 6. Fibroma -
pathology 7. Skull - pathology I. Title
WE 705 M235c
ISBN 3-8055-3704-2

Drug Dosage
The authors and publisher have exerted every effort to
ensure that drug selection and dosage set forth in this text
are in accord with current recommendations and practice
at the time of publication. However, in view of ongoing
research, changes in government regulations, and the
constant flow of information relating to drug therapy and
drug reactions, the reader is urged to check the package
insert for each drug for any change in indications and dosage
and for added warnings and precautions. This is particularly
important when the recommended agent is a
new and/or infrequently employed drug.

All rights reserved.
No part of this publication may be translated into other
languages, reproduced or utilized in any form or by any
means, electronic or mechanical, including photocopying,
recording, microcopying, or by any information storage
and retrieval system, without permission in writing
from the publisher.

Copyright 1983 by S. Karger AG, P.O. Box,
CH-4009 Basel (Switzerland)
Printed in Switzerland by ThOr AG Offsetdruck, Pratteln

ISBN 3-8055-3704-2

Contents

Acknowledgments . . . VII

1. Introduction . . . 1

2. Historical Background . . . 3

3. Embryological and Anatomical Considerations: A Brief Discussion . . . 8

4. Some General Remarks on Histological Diagnosis . . . 10

5. Terminology Currently in Use . . . 14
   Nonossifying Fibroma . . . 14
   Ossifying Fibroma, Fibrous Osteoma (Osteofibroma, Fibro-Osteoma),
   Juvenile Ossifying Fibroma and Aggressive Fibrous Dysplasia . . . 18
   Fibrous Dysplasia (Jaffe-Lichtenstein) . . . 20
   Cemental Lesions . . . 26
   Periapical Cemental Dysplasia (Periapical Fibrous Dysplasia) . . . 26
   Cementifying Fibroma . . . 28
   Benign Cementoblastoma . . . 28
   Gigantiform Cementoma . . . 32
   Isolated Dystrophy of the Jaw (Lautenbach-Dockhorn) . . . 33
   Desmoplastic Fibroma . . . 34
   Neurofibroma . . . 45
Myxoma (Fibromyxoma, Myxofibroma) . . . 51

6. Examination of the Case Material and the Conclusions Drawn from It . . . 53
WHO Classification Applied . . . 53
Lesions of Nontumorous Origin: A Consideration . . . 57
Lesions of Tumorous Origin: A Consideration . . . 73
Tumors of Osteoblastic Origin . . . 77
Osteoma . . . 77
Osteoid Osteoma . . . 78
Benign Osteoblastoma . . . 83
Tumors of Cementoblastic Origin . . . 96
Tumors of Fibroblastic Origin . . . 97
Tumors of Multiple Cytogenic Origin . . . 97

VI Contents

7. Pathological and Clinical Characteristics of the Proposed New Entities . . . 105
Lesions of Reparative Origin . . . 105
Osseous Keloid . . . 105
Some Illustrative Cases Considered . . . 105
Clinical and Radiological Characteristics . . . 118
Histopathological Characteristics . . . 120
Differential Diagnosis . . . 121
Lesions of Neoplastic Origin . . . 128
Desmo-Osteoblastoma (Psammous and Trabecular Types) . . . 128
Psammous Desmo-Osteoblastoma . . . 128
Some Illustrative Cases Considered . . . 128
Clinical and Radiological Characteristics . . . 139
Histopathological Characteristics . . . 144
Differential Diagnosis . . . 145
Trabecular Desmo-Osteoblastoma . . . 162
Some Illustrative Cases Considered . . . 162
Clinical and Radiological Characteristics . . . 172
Histopathological Characteristics . . . 175
Differential Diagnosis . . . 180
Benign Periodontoma (Central and Peripheral Types) . . . 184
Some Illustrative Cases Considered . . . 184
Clinical and Radiological Characteristics . . . 195
Histopathological Characteristics . . . 200
Differential Diagnosis . . . 204

8. Conclusions . . . 212
Acknowledgments

The author would like to express his heartfelt thanks to Professor H. Obwegeser, the Director of the Clinic for Maxillo-Facial Surgery of the Zürich University Hospital, for the constant encouragement he has received from him over the years in carrying out his investigations in the field of oral pathology. Unless otherwise stated, all the X-rays and clinical pictures presented in this study have been provided by Professor Obwegeser, and the author is particularly grateful to him for having made them available.

The assistance provided by PD Dr. H. Sailer, from the same Clinic, in discussing a number of clinical questions arising from the case histories used here is also greatly appreciated.

Special thanks must go to Bettina Fest for her tireless efforts in typing and retyping the numerous German and English drafts of this book. Her spirit of cheerful and unflagging cooperation and the meticulous care with which she has worked have been invaluable.

Although the author photographed the histological material presented here himself, he is deeply indebted to Hannes Naef a photographer at the Institute for Pathology of the Zürich University Hospital, not only for his expert technical advice, but also for the dispatch with which he developed and printed the illustrative material presented here.

The author’s special appreciation is gladly tendered to Nicholas MacCabe, who translated the original German manuscript into English. That the author’s ideas and arguments have been faithfully and accurately presented is due not only to Mr. MacCabe’s
extensive knowledge of both the languages, but also to the interest and enthusiasm he has shown in his work, his grasp of the arguments put forward and the cooperative spirit he has shown in discussing every aspect of this book.

Finally, the author would like to thank his publishers for their amiable, helpful and professional approach to the preparation of this book.

Miro Makek

To Vesna, Luka and Martin