

JOHN EBNEZAR CBS | Handbooks in
Orthopedics and Fractures

SERIES

Yoga Therapy in Common Orthopedic Problems

Yoga Therapy for Low Backache



John Ebnezar



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JOHN EBNEZAR **CBS**

Handbooks in
Orthopedics and Fractures

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**Yoga Therapy in
Common Orthopedic Problems**

Yoga Therapy for Low Backache

to

my mother (late) Sampath Kumari

my wife Dr Parimala

my lovely children Rakesh and Priyanka

and

all my patients

John Ebnezar

- Holder of the **Guinness Book of World Records** for the most number of books written by an individual in a single year.
- Listed in the **India Book of Records** for the most number of books written by an individual.
- Recipient of the highest civilian awards of Karnataka, the **Rajyotsava Award 2010** and the **Kempegowda Award 2011**.
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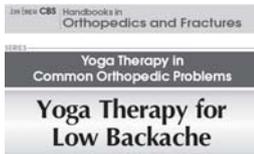
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Preface

This book is a part of the 100+ book series

JOHN EBNEZAR CBS **Handbooks in Orthopedics and Fractures**

which deals with the orthopedic problems of public health importance. The purpose of these books is to educate and create awareness among the readers about various problems associated with orthopedics. Through this way the readers get to know all about various orthopedic problems directly from a specialist. This will help a reader immensely in getting the right knowledge as most of them depend on the internet and magazines which distort and misrepresent various pieces of information concerning health topics, leaving the readers confused and worse still improperly educated. This may harm more than helping them find solutions to their problems. The purpose of these books, therefore, is to educate the readers right in their quest for knowledge on the common health and associated problems.

The 100+ book series has been brought out in a single calendar year.

This is a book on the role of yoga therapy in the treatment of low backache which is the most common complaint in the world next only to headache. This book gives an insight into various aspects of low backache like its causes, presentation, investigations, treatment, complications and their impact on the individual health and the society in general and the role of yoga therapy in the treatment of this common problem. This is the first ever book which exclusively deals with all the aspects of common low backache and the role of yoga. Yoga therapy has assumed significance in the present day context due to the element of stress in the causation and progression of musculoskeletal problems like lowbackache. Modern medicines are inadequate in the treatment of stress related problems and this is where yoga fits in with its mind body approach and thus fulfills this lacunae.

Highlights of this book

- Simple and lucid language
- Good Illustrations
- Good Clinical photograph wherever necessary
- Relevant X-rays
- Short summaries
- Anecdotes
- Suggestions for self-help techniques
- Illustrations of the steps of integrated yoga therapy practices.

This book has ubiquitous utility and usage and can be useful to the orthopedic surgeons, postgraduate students in orthopedics, undergraduate medical students, doctors from all disciplines of medicine, physiotherapists, therapists practising alternative systems of medicine, rehabilitation specialists, and most importantly the common people. It is particularly useful to those unsung heroes who work in remote areas with minimum infrastructure. They can use this book as a ready-reckoner. Seldom will you find a book that covers such a wide spectrum of readers.

Knowing all about yoga therapy in low backache creates an awareness and helps one to understand the role of yoga in the treatment of low back pain.

Please remember that this book is meant to educate and not substitute the role of a doctor. I advise you to see your orthopedic surgeons if you are suffering from any of the orthopedic problems and use this book to update your knowledge about the condition and practice simple self-help techniques apart from adhering to the do's and don'ts for each condition.

Constructive criticism and useful suggestions are invited to make the book more effective in its forthcoming editions.

John Ebnezar

Acknowledgments

This volume is a part of the 100+ book series brought out in a single calendar year. This was a huge and mammoth task attempted first time ever by an author and a publisher in the world. Such an herculean effort could not have been possible without the active involvement of those concerned in CBS Publishers & Distributors. I thank Mr Satish K Jain, Managing Director of CBS P&D, for agreeing to be a part of this world-record feat in bringing out this book in the Series. My special thanks to Mr YN Arjuna who showed special interest in this work and channelized his entire energy into this improbable feat. My special thanks to Mrs Ritu Chawla and her entire dedicated team who have toiled day and night to make this dream a reality. I thank members of the entire editorial-production team of CBS P&D who have worked hard behind the scenes to bring out this book.

My special thanks to Dr Yogitha for actively helping me in the compilation of all the books. I also thank all the staff members of my hospital who have helped me at various levels during the making of this book.

John Ebnezar

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1

Low Backache

INTRODUCTION

Life is a gift bestowed upon us by nature and God. To savor this gift to the full, one needs a healthy life. Diseases tend to upset the rhythm of our life and may spell doom to this joyous gift of God. Diseases are the darker faces of life threatening our very existence. Some of the diseases are not our making and hence not in our control while a majority of them are man-made and is due to the abuse and insults we hurl upon our bodies knowingly or unknowingly. Backache is one such disease created and nurtured unwittingly by us.

Among all the maladies afflicting the human race backache ranks second, next only to headache and common cold. It is ubiquitous in distribution, cuts across all races, culture and geographical barriers. It is infamously known as the modern international epidemic. However, its existence is not new having been known from the beginning of the history of mankind.

History of Backache (Highlights)

- Backache is known since the beginning of history.
- It was known as the work of a demon and its curse.
- Greeks first recognised it as a disease.
- Posterior displacement of the disc and backache was first described in the year 1911.
- In 1932, the source of sciatica was said to be due to disc prolapse.
- In 1934, surgery was first done for disc herniation.

Introduction

- Backache is the most common spine disorder affecting 80% of the population around the globe.
- It is next only to common cold and headache
- Common low-backache accounts for nearly 80% of these cases (Muscular backache in 90% and facets and disc related backache in 10%)
- Uncommon low-backache accounts for the remaining 20% of the cases.

How is Backache Different from other Diseases?

Prevalence

As already mentioned, it affects people all around the globe rich or poor alike. Every human being suffers from this problem at some stage of life. It is known to affect 8 out of 10 people. It goes away easily with simple treatment only to return back with a vengeance in 7 out of 10 cases. In about 7–10% of the population it stays forever. What is more intriguing is that in 7 out of 10 cases it resolves on its own without much treatment. These features of this disease give rise to the optimism that it can be collared and conquered.

Since it affects a large population it leads to decrease work-place productivity and is a leading cause of sickness absenteeism. Add to this the enormous cost of treatment and economic imbalance of the individual and the country and the misery is complete.

Consider the following facts about backache

Backache is a worldwide problem. During the present times it has assumed lot of significance for the reasons mentioned below:

- What was known as an ancient curse, is now a modern international epidemic.
- 8 out of 10 people are affected with backache at some stage of life.
- It is next only to common cold and headache. Backache is the second most common reason for people all over the world to seek a doctor.

Prevalence

- 1 in 3 occupational health problems—WHO region of the Americas
Occupational economic stressors, physical and psychosocial
- Worldwide—37%
- South east asia – 39% including India and China (Punnett et al, Am J Ind Med: 2005)
- Outpatient orthopedic unit in north India 23% (Sharma et al IMS 2003)
- 1% of US population chronically disabled (Anderson, 1997. The adult spine: Principles and practice)

- It becomes chronic in 7 to 10% of the population.
- It leads to decrease workplace productivity.
- It is one of the most frequent causes of sickness absenteeism
- Cost of the treatment of back pain and loss of productivity in work is very high.
- Back pain recurs in 7 out of 10 cases.
- More often there is no treatment for backache except for rest and painkillers.
- More often the origin of backache is difficult to diagnose.
- Most back pain go away with minimum treatment.
- 7 out of 10 cases get better by 2 weeks by themselves.
- After 6 weeks symptoms in 90% will subside.

Note: Some cases of back pain are serious and cause nerve damage.

What is the best way to deal with back pain?

Backache is a growing menace, and it can be best tackled by acquiring sound knowledge about the various aspects of your back. An effective strategy should follow the protocol as mentioned below:

- Try to understand everything about your back.
- Know the structure of your back and how it works.
- Try to know what causes your back to ache.
- Know about posture and the value of acquiring good postural habits.

Economic burden

- Costly condition- lost work days and disability claims (Franks et al, Spine 1996)
- Euro 1,167 million to Euro 1,975 million in France or 14.4–24.2% of the total spending of social security occupational illness (Ekman et al, acta orthop: 2005)
- Large amount of care seeking (Carey, Garrette et al, Spine: 2005)
- Unexpected failures and recurrences after physical and surgical therapies (Rodriguez-Farcia et al, Neurocirugia: 2005)

Role of stress in LBA

- Psychological factors- at the realm of pain research (Turk, acta anaesthesiology Scandanavica: 1999)
- Psychosocial variables — greater impact than biomedical or biomechanical factors (Linton, Spine: 2000)
- Psychological disturbances — like anxiety, depression, fear avoidance behaviors either cause or result from CLBP

- Know the importance of exercises in keeping your back fit.
- Acquaint yourself with information about the various investigations your doctor advises you for backache.
- Try to know various treatment methods of backache.
- You should know when to see a doctor because all backaches do not require the services of a doctor.
- Try to know the ways and means to prevent recurrence of your backache.

Let us begin with first things first by trying to know how your back is designed?

Design of your Back

It definitely makes lot of sense to know how your back is designed before knowing all about the backache.

What is Back?

It is the rear portion of our neck, shoulder, chest, abdomen and pelvis. Accordingly it is divided into neck, upper back, midback, lower back, seat bones and tailbones (Fig. 1.1). Backache may strike any of the above areas but it has a greater affinity for the lower back and the neck.

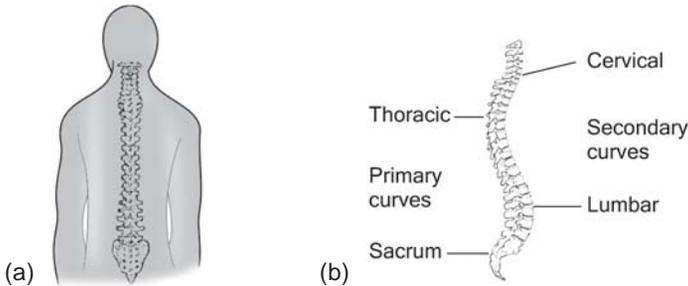


Fig. 1.1: Your back extends from neck above to the tailbone below. (a) Spinal curve appears straight from the back, (b) Spinal curve appears S-shaped from sides

Structure of your Back

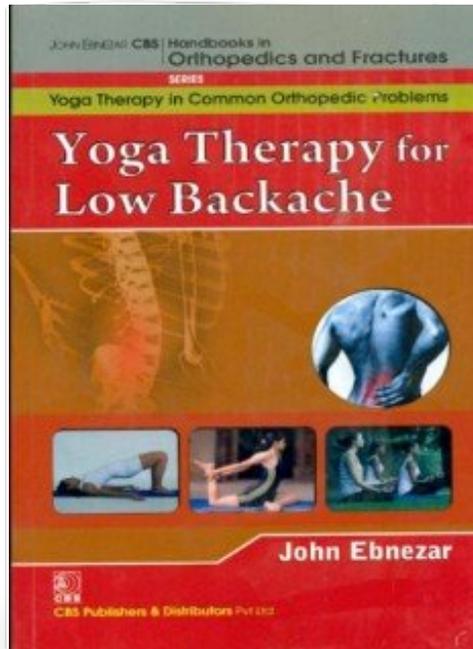
Your back is a specialized structure designed with great precision and accuracy by God. It is a family of bones, muscles, joints, ligaments, and nerves. They all join hands together to form a good flexible back. Bones form the frame of our back, and this in turn seeks the help of muscles and ligaments for support, stability and movements.

To know all about your back, know about

- The bones.
- The discs.
- The back muscles and their ligaments.
- The various spinal nerves emerging out of your back.
- The arrangement of your bones with respect to each other.

A bony column called the spine forms the centre of our back. It is not a single bone but a vertical complex of 33 small

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