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PAEDIATRIC ORTHODONTICS

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eNetwork

Paediatric Orthodontics

By Dr. Arturo Fortini and team (Drs. Lanteri, Tessore and Caburlotto)



LEVELS

Difficulty ●●●

Theory ●●●●●

Practice ●●

KEY INFO

English

On Demand

Orthodontics

11h

14 theoretical lectures

Clinical Yes

NO

SUMMARY

Topic:

Learn how to expertly diagnose and treat paediatric orthodontic emergencies

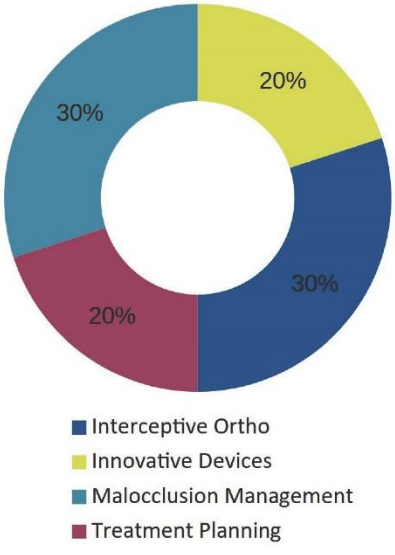
Objectives:

- Modern diagnostic procedures dedicated to young patients
- Different diagnosis skills for the correct formulation of treatment plans
- Guidelines and protocols for the clinical management of malocclusion during the various treatment phases
- Movable and fix devices used in paediatric orthodontics
- Customized elastomeric appliances
- The proper treatment timing
- The importance of investigate the etiology of malocclusions
- Different types of crowding and the rating of their severity

About the author:

Dr. Arturo Fortini is an internationally renowned specialist in Orthodontics and he s currently practicing as a freelance practitioner in Florence. He s the author of numerous books and scientific publications on Orthodontics in Italian and international journals. He wrote the books Contemporary practical orthodontics and Orthodontic treatment of the class II non-compliant patient published by Ed. Quintessence.

SKILLS YOU WILL LEARN



Description of the course:

Dr. **Arturo Fortini** and **his team**, in collaboration with **osteocom**, welcome you to "**Paediatric Orthodontics**", a comprehensive video course dedicated to the **interception**, **prevention** and **early treatment** of **malocclusions** in **young patients**, from early childhood until the age of full tooth development.

Along this video course, lecturers will talk extensively about **orthodontic emergencies** and clinical situations that demand **early treatment**.
For modern orthodontists, it is **mandatory** to **have access** to the most proficient **diagnostic tools** for identifying **potential risks** and consequently intervene early, **avoiding** a possible **escalation** of the **malocclusion** to the point where **surgery is required**.

Participants will acquire a **set of skills** to confidently **evaluate any clinical scenario** and formulate an **optimal treatment plan**. The exploration of **traditional treatments** and **modern diagnostic procedures** will provide key insights for every paediatric orthodontist.

Several clinical cases will be presented to show the wide range of **possible orthodontic emergencies** that may occur in young patients, providing you with all the necessary **tips&tricks** to face these clinical scenarios in the best possible way.

By attending this course, you will deepen your knowledge of:

- Modern **diagnostic procedures** for young patients
- Different **diagnostic skills** for the correct formulation of **treatment plans**
- **Guidelines** and **protocols** for the clinical **management of malocclusion** during the various treatment phases
- **Movable** and **fix devices** used in paediatric orthodontics
- **Customized elastomeric** appliances
- The proper **timing** of treatment
- The importance of **investigating** the **etiology** of malocclusions
- Different types of **crowding** and the **rating** of their severity

At the end of this course, you will be able to:

- **Identify** early signs of **dento-maxillary discrepancy**

- Deal with severe **lack of space** in the **dental arch**
- Detect the **mandibular growth peak** of each patient
- Choose the **correct size** of the **orthodontic appliances**
- Understand the amount of **force** to be used and the correct **type of traction**
- Manage the **activation phases** of the most commonly used orthodontic appliances
- Establish fruitful **relationships** with **other professionals**
- **Diagnose** different types of **jaw deficit**

Who the course is addressed to:
This video course is recommended to **all orthodontists** who wish to **specialize** or deepen their knowledge of the clinical field of **paediatric patient management**.
The **highly didactic** nature of this video course, which takes nothing for granted but starts with **theoretical concepts** to arrive at **practical examples**, makes the course useful both for those with **previous experience** and for **younger people** who want to explore this clinical area for the first time.

This course includes:

- **14 theoretical video lectures** with several **clinical cases**



Video Lecture 1 - Customized elastomeric appliances (1h 10min) by Enrica Tessore and Valentina Lanteri

Description:
The goal of this first video lesson is to help you understand the **indications** for the **application of elastomers** according to **different types of malocclusion.**
Since the elastomer itself is a simple **functional device**, the lesson focuses on the importance of **adopting** a **different therapeutic approach** in which elastodontics is necessarily linked to **myofunctional orofacial therapy** in order to achieve an overall **retraining** of the **muscular** and **stomatognathic system**.

In particular, this lesson covers the following topics:

- **When** should young patients have their **first dental consultation**?
- The **importance** of understanding the **etiology** of **every malocclusion**
- **Customized** elastomeric appliances: **pros and cons**
- Which are the **objectives** of **elastomer treatment**?

- **Ad hoc therapies** adapted to **children** to prevent problems and **avoid surgery** at the **end of their growth**

Video Lecture 2 - Interdisciplinary treatments (1h 10min) by Enrica Tessore

Description:
Multidisciplinary approach is at the **heart of Orthodontics. In this lesson,** the need to **widen your perspective** and start looking at patients by **stepping out** of the **exclusive dental diagnosis** is discussed. You will notice that malocclusions are part of a **systemic process** and that it is therefore essential to **establish relationships** with other professionals such as **paediatricians**, **podiatrists**, **orthopedists**, **osteopaths** and **physiotherapists.**

In particular, this lesson covers the following topics:

- The **relation** between **oral breathing** and **malocclusions**
- What can we do for **oral breathers**?
- Which type of patient needs **speech therapy**?
- **Dysfunctional swallowing** and swallowing tests
- Which are the objectives of **myofunctional logopedic therapy**?
- What does the **physiotherapist** or the **osteopath** do?
- **Extraoral evaluation**: asymmetries of labial functions

Video Lecture 3 - Skeletal maturity evaluation (20min) by Arturo Fortini

Description:
In this video lesson, **protocols** for **assessing** the **skeletal maturity** of the patient are discussed.
The goal is to identify the **mandibular growth peak** because malocclusion management is **more effective** when the patient is close to this growth peak.
Different **peak assessment techniques** are shown, from the **most traditional** ones to the innovative **Third Finger Middle Phalanx Method**.

In particular, this lesson covers the following topics:

- **Traditional indicators** of skeletal maturity
- The **reliability** of **growth indicators**: current evidence and controversies
- The improved version of **Cervical Vertebral Maturation Method**
- The **accuracy** of **CVM method**
- The **rationale** behind the **Third Finger Middle Phalanx** maturational method

Video Lecture 4 - Crowding (42min) by Arturo Fortini and Alvise Caburlotto

Description:

Crowding is a problem that comes at the end of the emergence of the **terminal dentition** but, as Dr. Fortini explains, it is also an **important factor** in **paediatric orthodontics**.
This lesson focuses on the **evaluation** of the **severity** and **classification** of **different types** of **crowding**.

In particular, this lesson covers the following topics:

- The **definition** and the **causative factors** of **crowding**
- How do you **assess** the **severity** of crowding?
- **Crowding classification**: dental, radiographic, cephalometric, periodontal, aesthetic and iatrogenic
- In **which cases** should dental elements **be extracted** to **create space** in the arch?

Video Lecture 5 - Serial extractions (35min) by Arturo Fortini

Description:
In this lessons, Dr Fortini investigates the **rationale** for treating **crowding** and **malocclusions** with **serial extractions**; a procedure that is convenient in terms of **cost** and **treatment time**, as well as decreasing **patient discomfort**.
You will understand that **well-performed serial extractions** are a **guide** to the correct **eruption** and **positioning** of the teeth, but a complete and **detailed diagnosis** is required to achieve this goal.

In particular, this lesson covers the following topics:

- How to achieve aesthetically pleasing occlusal and skeletal relationships
- Why perform serial extractions?
- Which are the indicators of lack of space for which it's recommended to proceed with serialized extractions?
- Decision criteria: evaluation of the orthopantomography

Video Lecture 6 - Transversal First: Rapid expansion (1h 2min) by Valentina Lanteri

Description:
In this video lesson, you will see how to **correct transverse deficit** of the **upper jaw** with the use of **rapid expanders**. As patients are in a **state of growth**, the therapy must be **simple**, **time-saving** and allow early **detection** and treatment of malocclusions.

In particular, this lesson covers the following topics:

- **Maxillary expansion** in growing patients

- Which are the **causative factors** that require **early treatment**?
- Objective and **treatment plan**
- How to solve the **transverse skeletal deficit** and stimulate the **peri-maxillary sutures**
- How to improve the **patency** of the **nasal airways** and achieve a better **lingual posture**
- Effects of **maxillary expansion**

Video Lecture 7 - Transversal First: Leaf expander (1h) by Valentina Lanteri

Description:
Transverse deficit of the **upper jaw** is a common feature of many **types of malocclusion**. There are many **devices** available for its **management**, including the recently developed **Leaf Expander**, a device capable of applying **forces** of **predetermined intensity**, **direction** and **duration** thanks to its **Ni-Ti structure**.

In particular, this lesson covers the following topics:

- The **Leaf Expander** for **non-compliance** treatment in the **mixed dentition**
- Leaf Expander **technical features**: **low and continuous forces** predetermined by direction and intensity
- **Screw size** and dimension choice
- Activation protocolos
- Leaf Expander delivery and **removal protocol**

Video Lecture 8 - Maxillary transversal discrepancy: Ni-Ti expander (46min)

Description:
In this third lesson focusing on **maxillary expansion** to overcome **transverse discrepancy problems**, Dr Fortini discusses the **Nickel-Titanium Palatal Expander**, a device that produces **slow dento-alveolar expansion**.
The specialist analyses the **typical features** of this device and indicates in which **cases** its **adoption is recommended**.

In particular, this lesson covers the following topics:

- **Shape memory**, **transition temperature** and planned **pre-activation** of Ni-Ti Palatal Expander
- **Causative factors** of maxillary transversal discrepancy
- When to perform a **maxillary dento-alveolar expansion**?
- **Working stages**: molar distal rotation, molar and premolar expansion

Video Lecture 9 - Maxillary transversal discrepancy: Functional appliances (32min) by Arturo Fortini

Description:
Maxillary expansion can be achieved with various **functional devices**, both **removable** and **fixed**. In this lesson, the best ones are investigated, also considering **cost**, **time** and the degree of **compliance required** from young patients.
Devices that control **vertical**, **sagittal** and **transversal problems** at the same time by means of **slow** and **progressive expansion** are also presented.

In particular, this lesson covers the following topics:

- The evaluation of the **biomechanical final phase** to correct **teeth position**
- The management of the relationship between **centripetal** and **centrifugal forces**
- **Follow-up** at 4-6 years
- The specific characteristics of various **latest-generation devices**

Video Lecture 10 - Maxillary sagittal discrepancy: Excess (41min) by Alvise Caburlotto

Description:
Discrepancies in the **sagittal plane** can result from a **backward** or **forward overjet**. In this video lesson, Dr. Fortini discusses the treatment of **prominent upper front teeth**, i.e. the management of the **augmented overjet**.
Treatment should be started at an **early age** in order for it to be **efficient** and to **minimize** the risk of **possible damage**.

In particular, this lesson covers the following topics:

- The importance of **evaluating** all the **dento-alveolar** and **skeletal components**
- The **rationale** behind the treatment of **pubertal patients** with **mandibular excess**
- Components of **class II malocclusion** in children of **8-10 years of age**
- How to **normalize** the **overjet** and have **full control** of the **patient's jaw**

Video Lecture 11 - Maxillary sagittal discrepancy: Deficit (43min) by Arturo Fortini

Description:
In this video lesson, Dr. Fortini highlights how the **skeletal problems** caused by **defective growth** of the **upper jaw** are effectively considered one of the orthodontic emergencies for which early intervention is required.
Early detection and **correct timing** of intervention therefore become of **crucial importance**.

In particular, this lesson covers the following topics:

- Orthodontic treatment for **prominent lower front teeth**
- Which **class III cases** require treatment?
- **Maxillary dimension evaluation**
- **Timing of treatment** for **rapid maxillary expansion**

Video Lecture 12 - Mandibular sagittal discrepancy: Deficit (55min)

Description:
This lesson explains why skeletal problems caused by a mandibular growth deficit are considered a full-fledged orthodontic emergency.
A mandibular skeletal deficit results in an increased overjet, which is considered to be a valid reason for early treatment.
Epidemiological considerations highlight the considerable frequency of this type of problem.
Clinical cases showing treatments performed with Clark's Twin-Block are presented.

Video Lecture 13 - High vertical dimension (48min)

Description:
This lesson highlights the importance of controlling the increased vertical dimension, especially through early intervention.
The risks of late or incorrect intervention are discussed, as well as the concept of severity of an increased vertical dimension versus a reduction in the vertical dimension.
Cephalometric assessment becomes a fundamental tool for detection, control and planning, especially in paediatric age.
Fixed and removable appliances that are most frequently used in the treatment of skeletal problems of this type are classified and discussed, with a specific focus on indications, advantages and disadvantages.

Video Lecture 14 - Low vertical dimension (min)

Description:
This lesson emphasizes the importance of controlling the reduced vertical dimension, especially through early intervention.
Early intervention, in contrast to problems concerning increased verticality, allows good results in modifying facial heights and, consequently, facial profile.
Cephalometric assessment becomes a fundamental tool for diagnosis, control and planning, especially in paediatric age.

Scan the code and enter the course



Author's Bio:
Dr. Arturo Fortini is an internationally renowned specialist in Orthodontics and he's currently practicing as a freelance practitioner in Florence. He's the author of numerous books and scientific publications on Orthodontics in Italian and international journals. He wrote the books "Contemporary practical orthodontics" and "Orthodontic treatment of the class II non-compliant patient" published by Ed. Quintessence.


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