

List of Contents

Title	Page No.
<i>List of Abbreviations</i>	<i>II</i>
<i>List of Figures</i>	<i>III</i>
<i>List of Tables</i>	<i>V</i>
♦ <i>Introduction</i>	<i>1</i>
♦ <i>Review of Letreture</i>	
○ <i>Bronchoscope</i>	<i>5</i>
○ <i>Embryology.....</i>	<i>26</i>
○ <i>Anatomy</i>	<i>32</i>
○ <i>Congenital Malformation and Common Variations</i>	<i>36</i>
♦ <i>Aim of the Work</i>	<i>80</i>
♦ <i>Subjects and Methodology</i>	<i>81</i>
♦ <i>Results</i>	<i>87</i>
♦ <i>Discussion</i>	<i>105</i>
♦ <i>Summary and Conclusion.....</i>	<i>118</i>
♦ <i>Recommendations.....</i>	<i>122</i>
♦ <i>References.....</i>	<i>123</i>
♦ <i>Arabic summary</i>	<i>-</i>

List of Abbreviations

Abbreviation	Stands for
APTT	Activated partial thromboplastin time
BTS	British THORACIC Society
B.A.L	Broncho-alveolar lavage
COPD	Chronic obstructive pulmonary diseases
COSHH	The Control of Substances Hazardous to Health
CPAP	Continuous positive airway pressure
CT	Computed tomography
EBUS	Endobronchial ultrasound
ECMO	Extracorporeal membrane oxygenation
F.O.B	Fiberoptic bronchoscopy
FEV1	Forced expiratory volume 1
INR	The international normalised ratio
LRTIs	Lower respiratory tract infections
MI	Myocardial infarction
TBNA	Trans-bronchial needle aspiration
TBVS	Tracheobronchial variations
TEF	Tracheo-esophageal fistula
TO	Tracheobronchopathia osteochondroplastica

List of Figures

Fig. No.	Title	Page No.
1	Endobronchial ultrasound.	23
2	Electromagnetic navigation bronchoscopy.	24
3	Virtual bronchoscopy.	25
4	Trachea and main bronchi.	35
5	Illustration of agenesis of trachea.	37
6	Bronchoscopic findings in tracheal agenesis.	38
7	Tracheal stenosis caused by a tracheal web.	39
8	Coronal projection of the CT scan showing the associated long-segment tracheal stenosis with severe distal deviation and obstruction ((Pulmonary artery sling).	42
9	Complete cartilaginous tracheal rings, the posterior membranous component of the trachea is absent.	43
10	Shows two characteristic features of tracheobronchomalacia on bronchoscopy.	46
11	Shows dynamic changes of trachea during respiratory period under bronchoscopy.	46
12	(a) Expanding of a metal stent in airway carried by delivery device. (b) Full reopening of the collapsed airway with the expansion of the placed stent.	48
13	A tracheal bronchus originates from the right lateral wall of the trachea above the level of the main carina and courses to the right.	49
14	Types of tracheo-oesophageal fistula and esophageal atresia malformations.	56
15	Bronchoscopy demonstrates fistulous opening at the posterior aspect of the trachea just 1cm above the carina.	56

List of Figures

16	(a) Shows contrast media passing through abnormal fistulous connection in the midesophagus during injection of meglumine diatrizoate via gastric tube. (b) Shows fistula located at the posterior tracheal wall visualized during bronchoscopy. (c) Shows color staining of the tracheal fistula after injection of methylene blue via gastroscopy. (d) Shows insertion of a guide wire towards the esophagus via bronchoscopy. (e) Shows the guide wire entering the esophagus. (f) Shows the guide wire loop between trachea and esophagus.	58
17	TO by bronchoscopy.	60
18	Tracheal diverticulum in the membranous posterior part of the trachea above the carina.	68
19	Bronchial atresia by bronchoscopy.	70
20	Bronchoscopic findings.	79
21	The age groups involved in the study.	88
22	The sex involved in the study.	89
23	The incidence of congenital malformations and TBVS among Egyptians.	93
24	The relation between age groups and presence of congenital malformations and TBVS.	94
25	The relation between sex and presence of congenital malformations.	96
26	Congenital malformations of trachea.	98
27	Right upper lobe 2 segments.	101
28	Left upper lobe 3 segments.	101
29	Left upper lobe 4 segments.	101
30	Bronchomegally in Monier Khun syndrome.	102
31	Bronchomegally in Monier Khun syndrome.	102
32	Bifid spur.	103

List of Tables

Table No.	Title	Page No.
1	The describes the 5 main categories of congenital TEFs.	50
2	The age groups involved in the study.	87
3	The sex involved in the study.	89
4	Indication of bronchoscopy in the studied patients.	90
5	The relation between the age group and indication of bronchoscopy.	91
6	The incidence of congenital malformations and TBVS among Egyptians.	93
7	The relation between age groups and presence of congenital malformations and TBVS.	94
8	The relation between sex and presence of congenital malformations or TBVS.	96
9	The relation between indication of bronchoscopy and presence of congenital malformations or TBVS.	97
10	Congenital malformations of trachea.	98
11	The congenital malformations and common TBVS in broncho-pulmonary segments.	100
12	The incidence of each congenital malformations and common TBVS recorded in the study.	104



Introduction





Aim of the Work





Bronchoscope





Embryology





Anatomy





Congenital Malformation and Common Variations





Subjects and Methodology





Results





Discussion





Summary and Conclusion

