

## **Acknowledgment**

I wish first to thank Allah for helping me to accomplish this research and for providing me with such supportive supervisors.

I would like to express my profound gratitude and appreciation to Professor Dr. Shaaban Mohammad Al Assal, Prof. of Clinical Oncology and Nuclear Medicine, Faculty of Medicine, Alexandria University who devoted great efforts and lot of his time and interest in supervising this work together with his guidance and careful instructions.

I wish to express my deep appreciation to Professor Dr. Yousry Abdelmaguid Rostom, Professor of Clinical Oncology and Nuclear Medicine, Faculty of Medicine, Alexandria University, for his kind supervision, continuous guidance, and constructive remarks.

My special thanks to Dr. Azza Mohammad Darwish Lecturer in Clinical Oncology and Nuclear Medicine Faculty of Medicine, Alexandria University, for her continuous help, valuable advice and support.

I'm also thankful to all staff members and to my colleagues in the Clinical Oncology and Nuclear Medicine Department for their help.

# LIST OF CONTENTS

<b>ACKNOWLEDGMENT.....</b>	<b>i</b>
<b>LIST OF CONTENT .....</b>	<b>ii</b>
<b>LIST OF TABLES .....</b>	<b>iii</b>
<b>LIST OF FIGURES .....</b>	<b>v</b>
<b>I. INTRODUCTION.....</b>	<b>1</b>
<b>II. AIM OF THE WORK .....</b>	<b>27</b>
<b>III. MATERIALS AND METHODS .....</b>	<b>28</b>
<b>IV. RESULTS .....</b>	<b>30</b>
<b>V. DISCUSSION .....</b>	<b>65</b>
<b>VI. SUMMARY .....</b>	<b>71</b>
<b>VII. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>73</b>
<b>VIII. REFERENCES.....</b>	<b>74</b>
<b>PROTOCOL</b>	
<b>ARABIC SUMMARY</b>	

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
(1) Distribution of the studied cases in relation to all head and neck cancer and all body tumors:	<b>30</b>
(2) Distribution of the studied cases according to primary site (n=255)	<b>30</b>
(3) Distribution of hypopharynx cancer cases according to primary involved subsite (n=104)	<b>31</b>
(4) Distribution of oral and oropharynx cancer cases according to primary site (n=151)	<b>31</b>
(5) Distribution of studied patients according to epidemiologic data	<b>32</b>
(6) Distribution of studied cases according to associated co morbidities: (n=255)	<b>33</b>
(7) Distribution of all patients according to predisposing factors (n = 255)	<b>33</b>
(8) Distribution of our study patients according to presenting signs and symptoms (n=255)	<b>34</b>
(9) Distribution of all patients according to histopathological types (n = 255)	<b>34</b>
(10) Distribution of hypopharynx cancer cases according to stage at diagnosis (n=104)	<b>35</b>
(11) Distribution of oral and oropharynx cancer cases according to stage (n=140)	<b>36</b>
(12) Distribution of all cases according to investigations (n=255)	<b>37</b>
(13) Distribution of the all patients according to type of biopsy	<b>38</b>
(14) Distribution of the studied cases according to whether patients received treatment or not	<b>38</b>
(15) Distribution of all patients according to treatment modality	<b>39</b>
(16) Distribution of all patients according to surgical treatment	<b>40</b>
(17) Distribution of the studied cases according to multiple positive LNS and positive margin	<b>40</b>
(18) Distribution of the studied cases according to surgery radiation time interval	<b>41</b>
(19) Distribution of all hypopharyngeal cancer patients according to chemotherapeutic treatment	<b>41</b>
(20) Distribution of all oral and oropharyngeal cancer patients according to chemotherapeutic treatment	<b>42</b>
(21) Distribution of hypopharyngeal cancer patients according to	<b>43</b>

<b>Table</b>	<b>Page</b>
	concomitant chemo-radiotherapy (CCRTx)
<b>(22)</b>	Distribution of Oral and Oropharynx cases according to concomitant chemo-radiotherapy <b>44</b>
<b>(23)</b>	Distribution of Hypopharyngeal cancer patients according to radiotherapy <b>45</b>
<b>(24)</b>	Distribution of Oral and Oropharyngeal cancer patients according to radiotherapy <b>46</b>
<b>(25)</b>	Distribution of all patients according to development of relapse <b>47</b>
<b>(26)</b>	Distribution of hypopharynx cancer patients according to salvage therapy <b>48</b>
<b>(27)</b>	Distribution of oral and oropharyngeal cancer patients according to salvage therapy <b>49</b>
<b>(28)</b>	Distribution of the studied cases according to 2nd primary <b>50</b>
<b>(29)</b>	Distribution of the studied cases according to palliation <b>50</b>
<b>(30)</b>	Distribution of the studied cases according to Condition at last visit <b>51</b>
<b>(31)</b>	Overall survival estimates of hypopharyngeal cancer patients in relation to patients' age <b>54</b>
<b>(32)</b>	Disease free survival estimates of hypopharyngeal cancer patients in relation to patients' age <b>54</b>
<b>(33)</b>	Overall survival estimates of oral and oropharyngeal cancer patients in relation to patients' age <b>55</b>
<b>(34)</b>	Disease free survival estimates of oral and oropharyngeal cancer patients in relation to patients' age <b>55</b>
<b>(35)</b>	OS estimates in relation to degree of tumor differentiation in hypopharyngeal cancer patients <b>56</b>
<b>(36)</b>	DFS estimates in relation to degree of tumor differentiation in hypopharyngeal cancer patients <b>56</b>
<b>(37)</b>	OS estimates in relation to degree of tumor differentiation in oral and oropharyngeal cancer patients <b>57</b>
<b>(38)</b>	DFS estimates in relation to degree of tumor differentiation in oral and oropharyngeal cancer patients <b>57</b>

## LIST OF FIGURES

<b>Figure</b>		<b>page</b>
<b>(1.A)</b>	lateral view of the oral cavity	<b>4</b>
<b>(1.B)</b>	Kaplan-Meier overall survival estimates for oral, oropharyngeal, and Hypopharyngeal cancer patients	<b>52</b>
<b>(2)</b>	Kaplan-Meier disease free survival estimates for oral, oropharyngeal, and Hypopharyngeal cancer patients	<b>53</b>
<b>(3)</b>	Kaplan-Meier Stage stratified overall survival estimates for oral, oropharyngeal, and Hypopharyngeal cancer patients	<b>59</b>
<b>(4)</b>	Kaplan-Meier Stage stratified disease free survival estimates for oral, oropharyngeal, and Hypopharyngeal cancer patients	<b>60</b>
<b>(5)</b>	Kaplan Meier OS estimates in relation to type of treatment administered to hypopharyngeal cancer patients	<b>61</b>
<b>(6)</b>	Kaplan Meier DFS estimates in relation to type of treatment administered to hypopharyngeal cancer patients	<b>62</b>
<b>(7)</b>	OS estimates in relation to type of applied treatment for oral and oropharyngeal cancer patients using Kaplan Meier method	<b>63</b>
<b>(8)</b>	DFS estimates in relation to type of applied treatment for oral and oropharyngeal cancer patients using Kaplan Meier method	<b>64</b>