A CASE OF POST RADIOTHERAPY OROCUTANEOUS FISTULA- CASE REPORT

MIDCOMS 2021

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INTRODUCTION-

- Oral cancer treatment can cause mouth and throat problems.
- In oral cancer, Complications may be associated with chemotherapy or radiotherapy
- Complications may be caused by the treatment itself- direct complication or by side effect of the treatment.
- Complication may be acute (short term) or chronic (long lasting).

- Complication caused by radiation therapy to the head and neck includes the following-

Treatment modality	Short-term effects	Long-term effects
Surgery	Difficulty swallowing and speaking Anesthesia Paresthesia	Tissue and bone loss Functional problems Cosmetic concerns Difficulty swallowing and speaking
Radiation	Mucositis Altered taste Decreased saliva Increased risk of infections (e.g., *Candida albicans*) Trismus	Xerostomia Increased risk of periodontal disease and caries Subcutaneous fibrosis Postradiation osteonecrosis Telangiectasia
Chemotherapy and targeted therapy	Nausea and vomiting leading to enamel erosion Mucositis Skin rash Increased bleeding	Bone marrow suppression, increasing the risk of infection Neuropathy Loss of appetite Possible renal, pulmonary, and ototoxicity
Surgery and chemoradiation	Mucositis Stomatitis Xerostomia Altered taste Pain	Tissue and bone loss Increased risk of periodontal disease and caries Bone marrow suppression, increasing the risk of infection

INTRODUCTION-

- This paper presents a case of patient who tolerated radiotherapy of head and neck well and recovered well.
- However, one month later he presented with a pustule which gradually increased in size and developed into a full blown oro-cutaneous fistula within 3 days.
- This paper outlines the management of such a case and discusses the potential causes for the defect.

MATERIALS-

NORMAL SALINE

ACETIC ACID

VANCOMYCIN

METHODS-

- As orocutanous fistula was progressing, daily wound debridement was done.
- Cleaning was done with

Aceticacid +NS.

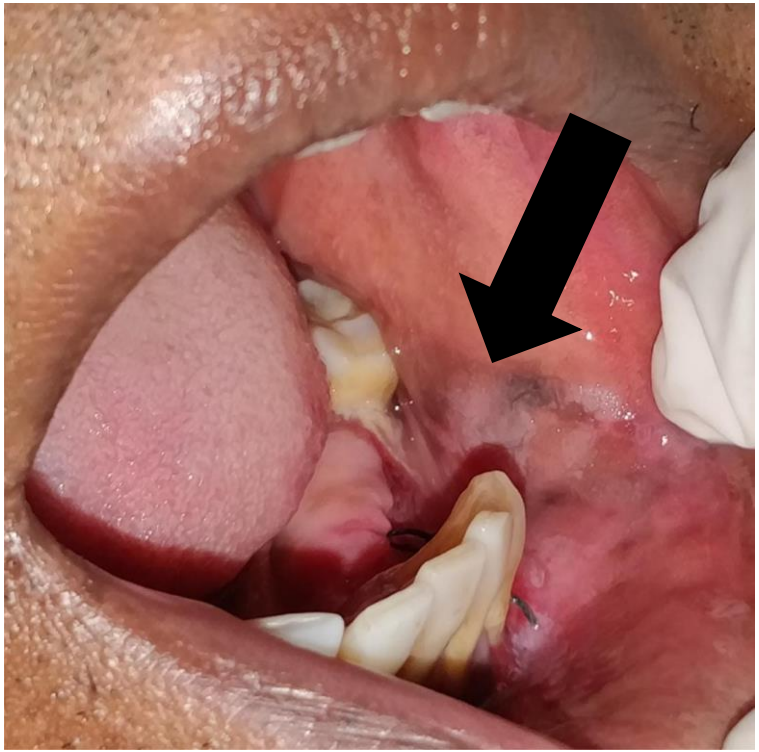
- Followed by topical application of Vancomycin powder over the edges of wound.

FINAL DIAGNOSIS (PREOPERATIVE)

MODERATELY DIFFERENTIATED

ORAL SQAMOUS CELL CARCINOMA INVOLVING LEFT BUCCAL MUCOSA

TNM STAGING- T4N2bMx



OPERATIVE PROCEDURE

WIDE LOCAL EXCISION+

COMPOSITE RESECTION+

RECONSTRUCTION USING PMMC FLAP ON 7/1/2021

POST OPERATIVE RADIOTHERAPY

- PATIENT UNDERWENT POST OPERATIVE RADIOTHERAPY 4 WEEKS POST OPERATIVELY
- 60 GY FOR 30 CYCLES
- FROM 10/2/2021 THROUGH 25/3/21

15 DAYS POST RADIATION-

- Radiation therapy was given one month post surgery.
- Development of punctum noted over operated region one month post radiation.
- SIZE- 2cm×1cm
- FNAC WAS DONE- sent for culture sensitivity.

CULTURE SENSITIVITY REPORT-

Patient was sucseptible to Linezolid and Vancomycin.

YOGESH KARALE

Age:44.00 Years Sex:MALE

Reference:Dr.--

Sample Collected At:
Ashoka Pathology Laboratory
Sant Tukaram nagar,
Pimpri,
Pune 411018 Zone PCMC

SID: 121074891
121074891
Collection Date:
18-05-2021 05:31 PM
Sample Date:
18-05-2021 05:31 pm
Report Date:
21-05-2021 04:59 PM

Culture Report

Test : Isolation & Antimicrobial susceptibility of aerobic organisms.

Method : Manual culture / ID & AST by Vitek 2 Automated System.

Specimen : Intra oral swab.

Organism : Methicillin Resistant Staphylococcus aureus.

Antimicrobial susceptibility	MIC (µg/ml)	Interpretation
Benzylpenicillin	0.25	Resistant
Cefoxitin Screen	Pos	
Ciprofloxacin	4	Resistant
Clindamycin	<=0.12	Susceptible
Erythromycin	<=0.25	Susceptible
Gentamicin	2	Susceptible
Inducible Clindamycin Resistance	Neg	
Levofloxacin	4	Resistant
Linezolid	2	Susceptible
Oxacillin	>=4	Resistant
Rifampicin	<=0.03	Susceptible
Teicoplanin	<=0.5	Susceptible
Tetracycline	2	Susceptible
Trimethoprim/Sulfamethoxazole	80	Resistant
Vancomycin	<=0.5	Susceptible

Comment : --

<End>

End of Report

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MC-3143

MEDICAL MANAGEMENT-

- Orocutanous fistula developed after 2 weeks

- MEDICINE MANAGEMENT-

  Tab LINEZOLID 600mg was given for 7 days.

MEDICAL MANAGEMENT-2 MONTH POST RADIATION

- As lesion was progressing

  wound debridement was done.
- Cleaning was done with

  Aceticacid +NS.
- Followed by topical application of Vancomycin powder over the edges of wound.

MEDICAL MANAGEMENT-2 AND HALF MONTH POST RADIATION

- Fresh bleeding was noted along the edges of the wound.
- WOUND EDGES -Healthy.
- REDUCED TLC COUNT NOTED.

VANCOMYCIN-

- Vancomycin is a well-known antibiotic against gram-positive bacteria.
- Its topical use is well studied in spine surgery, orthopedic surgery, and cranial surgery to reduce surgical site infection.
- The result of our study also shows decreased surgical site infection with its topical use when it is applied in addition to standard antibiotic prophylaxis.
- Topical application into a surgical wound also reduces the risk associated with parenteral administration.

CONCLUSION-

- Also,there is no data and observation that routine single-use vancomycin powder leads to antibiotic resistance.
- Known side effects associated with parenteral administration do not appear to occur when the drug is applied topically into a surgical wound.
- So we can conclude that routine use of vancomycin powder in surgical site as a surgical adjunct reduces the incidence of infections in orocutaneous fistula developed post radiotherapy.

REFERENCES-

1. Journal of Family Medicine and Primary Care
Wolters Kluwer -- Medknow Publications

Study of antibiotic efficacy of topical vancomycin powder in treatment of infected mandibular fractures and soft tissue surgical site infections

Geeta Singh, Deepak Passi, [...], and Sujay Milind Bhave

2. JBJI Journal of Bone and Joint Infection

Local Intra-wound Administration of Powdered Antibiotics in Orthopaedic Surgery

Andrew N. Fleischman and Matthew S. Austin

THANK YOU