

A Study on Management of Carcinoma Penis

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Abstract :

Aim : The aim of the study is to analyse the predisposing factors, stage at presentation, regional lymph nodes in the stages, the type of surgery done and the prognosis in the patients with carcinoma of penis. **Methods:** Patients who satisfy the inclusion criteria are taken up for surgery / chemotherapy after history taking , meticulous physical examination and other investigations. The patients underwent different modalities of treatment. The various patient details are charted such as predisposing factors , stage at presentation , regional lymph nodes in the stages , the type of surgery done and the prognosis of the patients in the post operative period and during the post chemotherapy / radiotherapy period.

Results: Most of the patients developed growth or ulcer in uncircumscribed penis. Out of 30 patients , 70% of patients had enlarged lymph nodes. Most of the patients presented in Stage II of the disease. Combined modality of treatment was given to 20% of patients including surgical and adjuvant chemotherapy and radiotherapy and others were given a single modality of treatment either surgery or chemotherapy or radiotherapy. Most of the cases were able to cope with morbidity following surgery and chemotherapy or radiotherapy.

Conclusion: Phimosis and poor personal hygiene of cases form major predisposing factors. Total amputation of penis is the treatment of choice for shaft involvement. Block dissection should be done for all FNAC proven mobile metastatic nodes. Radiotherapy/Chemotherapy is the treatment of choice for advanced / inoperable cases. Much of morbidity / mortality can be avoided through proper personal hygiene and seeking proper medical advice at early stage.

Keywords : penis , amputation , prognosis , surgery , chemotherapy , FNAC

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I. Introduction

The incidence of carcinoma penis varies markedly with the hygienic standard and the cultural and religious practices of different countries. Circumcision has been well established as a prophylactic measure that virtually eliminates the occurrence of penile carcinoma. The development of the tumor in uncircumscribed men has been attributed to the chronic irritative effects of smegma , a by product of bacterial action on desquamated epithelial cells that are within the preputial sac. Such exposure is accentuated by phimosis , which is found in 25% to 75% of patients reported in large series.

Although definitive evidence that smegma is a carcinogen has not been established , its relationship to the development of the penile carcinoma has been widely observed. Carcinoma of penis is so rare among the jewish where neonatal circumcision is a universal practice. In India, carcinoma of penis is extremely rare among the neonatal circumcision jewish population but somewhat more common among muslims who practice prepubertal circumcision. It is quite common among the uncircumscribed Christian and hindu population. The tumor is rare among the neonatally circumscribed individuals but more frequent when it is delayed until puberty. Adult circumcision appears to offer little or no protection from subsequent development of the disease. This suggests that some period of exposure to smegma may account for the decrease in effectiveness of prepubertal circumcision and negligible protective effect of adult circumcision. Although a history of trauma may predate to the development of carcinoma of penis, it is thought this finding is coincidental rather than casual. No consistent etiologic relationship of penile cancer to venereal diseases like syphilis , granuloma inguinale and chancroid has been found and association of the disease with penile cancer is probably coincidental. Penile cancer has also been associated with sexually transmitted HPV.

Background and purpose of the study:

The main purpose of the study is to analyse the predisposing factors, stage of presentation, regional lymph node status in the stages, the type of intervention done and the prognosis of the patients who are treated with surgery or chemotherapy and radiotherapy.

II. Materials And Methods

Study Area :

Coimbatore Medical College Hospital [CMCH] , Coimbatore.

Study population: Patients admitted in CMCH with a diagnosis of penile carcinoma by either FNAC or by tissue diagnostics.

Inclusion criteria:

- 1. Patients diagnosed to have penile carcinoma.**
2. Patients above 18 years
3. Patients who are willing for operative procedure for penile carcinoma
4. Patients willing for follow up.
5. Patients willing for Neoadjuvant / Postoperative chemotherapy / radiotherapy.

Exclusion criteria:

1. Stage 4 diseased patients of penile carcinoma with organ metastasis
2. Patients not willing for intervention.
3. Patients with co existing co morbid morbidities.

Study Period:

12 Months.From July 2015-June 2016

Sample Size:30.All patients eligible by inclusion and exclusion criteria are to be included in the study.

Study Design:

An observational study is to be conducted on patients admitted in CMCH for the above study. Informed consent will be taken from each respondent.

Parameters to be studied:

1. Age of the patients presenting with penile carcinoma
2. Religion
3. Incidence of penile carcinoma
4. Status of regional lymph nodes
5. Stage of the disease at the time of presentation.
6. Different modalities of treatment given to the patients.
7. Complications and follow up.

Methodology:

Patients who are selected based on the inclusion criteria undergo meticulous history taking , physical examination and investigated based according to the stage of the disease. Each patient is treated according to the stage of the disease either by definitive surgery or by chemotherapy and radiotherapy. The patients profile is charted and treated accordingly. Each of the patient is evaluated by physical examination and other investigations such as FNAC and CT abdomen and pelvis. The findings observed in each of the patient is tabulated and divided statistically into tabular columns describing the incidence of various parameters such as age , status of regional lymph nodes and stage of the disease at the time of presentation. Patients undergo intervention for the disease such as surgery or chemotherapy and radiotherapy according to the stage of the disease at the time of presentation. The patients are followed up for complications during the post operative period or post chemotherapy or radiotherapy and the findings are tabulated.

III. Discussion

Most of the patients with carcinoma penis belong to the forty to sixty age group. Muslims were free of the disease due to early circumcision. Of late the incidence of carcinoma penis has been reducing due to the awareness among the general population. Most of the patients with carcinoma penis belong to poor socio economic groups were uneducated and are not aware of personal hygiene and the presentation of this disease. Majority of the patients with carcinoma penis presented with proliferated growth and few inguinal lymph node involvement. Minority of patients presented with ulcerative growth but had more involvement of inguinal lymph nodes. The glans and prepuce were the most involved in carcinoma penis. The shaft and corona were involved in less number of cases. Biopsy reports of all the patients were reported as squamous cell carcinoma. Most of the patients underwent partial or total penile amputation with perinealurethrostomy. For operable inguinal lymph nodal involvement , a wait and watch policy was adopted in majority and after six weeks inguinal block dissection was planned , but only a few patients were regular in the follow up period. In other patients ilioinguinal block dissection along with partial or total amputation of penis was carried out.

Most of the patients are able to cope with morbidity following surgery. For inoperable cases Radiotherapy with or without Chemotherapy was given. Few patients who turned up for regular followup presented with inoperable inguinal or retroperitoneal lymph adenopathy for whom radiotherapy with or without chemotherapy was given.

IV. Conclusion

Most of the patients are between 41 to 60 years. Majority of the patients are from rural areas and from socially low economic group. Phimosi and poor personal hygiene of cases form major predisposing factors. Total amputation of penis is the treatment of choice for shaft of penis involvement. Block dissection should be done for all FNAC proven mobile metastatic nodes. Wait and watch policy regarding inguinal lymphadenopathy should be weighed with caution. Radiotherapy with or without chemotherapy is the treatment of choice for advanced or inoperable cases. Much of the morbidity or mortality can be avoided through proper personal hygiene and seeking proper medical advice at early stage of presentation of the disease.

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