

When it comes to cancer care, **choose hope.**

EVOLUTION OF PSEUDOMONAS AERUGINOSA ANTIMICROBIAL RESISTANCE IN A PATIENT WITH LOCALLY ADVANCED PENILE CANCER: A CASE REPORT

CLINICAL FEATURES

A 49-year-old male with advanced penile cancer, admitted to undertake a total penectomy, left radical orchidectomy and perineal urethrostomy, developed wound dehiscence and multi-organism infection.

OBJECTIVE

We report a case of evolving *Pseudomonas aeruginosa* antimicrobial resistance, following recent surgery and commencement of piperacillin-tazobactam.

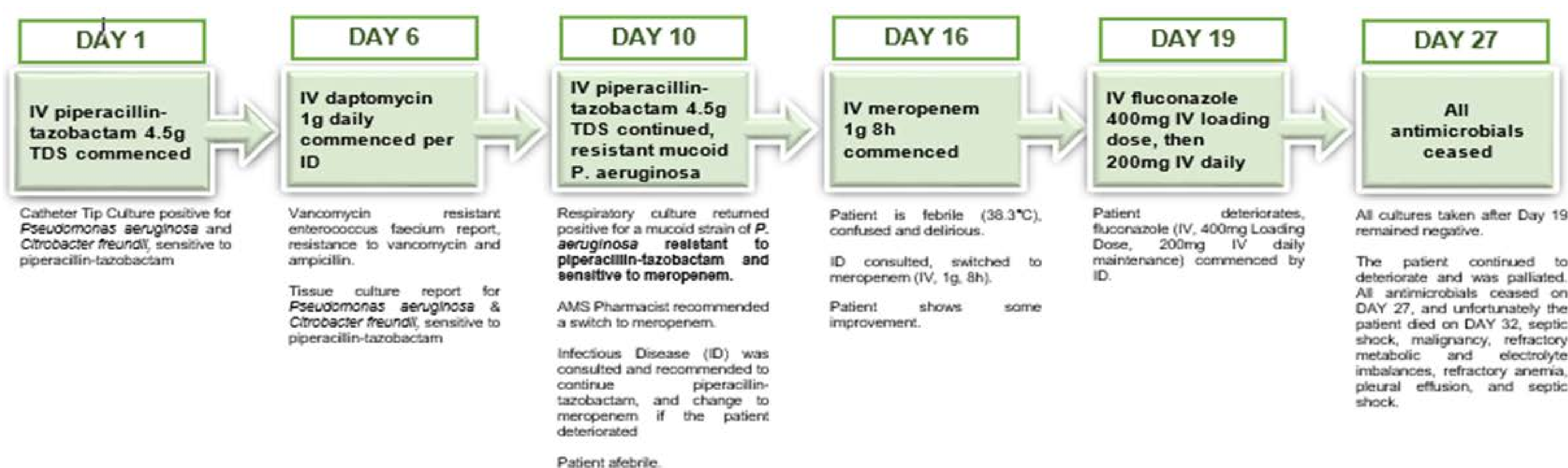


LITERATURE REVIEW

P. aeruginosa, exhibits intrinsic resistance to several antimicrobials, where infections are common in hospitalised patients. The Antimicrobial Stewardship (AMS) Clinical Care Standard recommends regular review of therapy, with the frequency of review dependent on patient acuity and risk factors.

RESULTS

Respiratory, tissue, wound and urine cultures returned positive for *P. aeruginosa* sensitive to piperacillin-tazobactam on DAY 1. Another respiratory culture was taken on DAY 10, returning positive for a mucoid strain of *P. aeruginosa*, resistant to piperacillin-tazobactam and sensitive to meropenem. The AMS Pharmacist recommended a switch to meropenem. Infectious Disease was consulted and recommended to continue piperacillin-tazobactam, and change to meropenem if the patient deteriorated, which occurred over the following two days due to septic shock, malignancy, refractory metabolic and electrolyte imbalances and refractory anemia. On DAY 16, the patient commenced meropenem. The patient continued to deteriorate and was palliated. All antimicrobials ceased on DAY 27, and unfortunately the patient died on DAY 32.



DISCUSSION

The AMS Pharmacist plays a crucial role in the surveillance of appropriate use of antimicrobials and liaising with medical teams and ID to achieve the best possible patient outcome.

