

Hence this is a much cheaper medium than pseudomonas isolation agar and cetimide agars which are used for the selective isolation of Pseudomonas from clinical specimens and this could be successfully replaced with the former in routine bacteriological work.

Nutritionally, fish meal extract is as good as peptone and has been successfully used for formulating media to grow bacteria and to test their antibiotic susceptibility. The performance of the media with regard to growth characteristics were largely at par with each other. However bacteria isolated from clinical specimens produced large colonies than those used from stock cultures. The counts of growth on all these media were same. The growth character of the pseudomonas aeruginosa isolated from clinical specimens is more important than those subcultured from stock cultures. Upon storage, stock cultures usually tend to lose some of their growth characteristics. Unlike peptone, fish meal is non hygroscopic and do not become sticky when exposed to air. Like peptone, fish meal has a very low content of copper and is free from fermentable carbohydrates and able to support the growth of moderately exacting bacteria like S aureus. In addition, fish meal has higher amino acid nitrogen 2.62% and tryptophan 1.87% than peptone for which the values are 1.7% and 1.2% respectively.⁵ The cost of fish meal is much low that is approximately Rs. 16/kg as against peptone with a price of Rs. 1600/kg. In addition to the quality of growth in Microbiology, the important aspect is to obtain the raw material very cheaply for routine clinical investigations. Hence modified fish meal extract agar may be a suitable alternative compared to other selective media in the primary isolation of Pseudomonas aeruginosa from clinical samples like sputum which is often contaminated with normal oral flora which was observed on blood and nutrient agar.

According to the previous studies, none of the selective media produced the growth of pseudomonas species in the primary isolation and it is better to inoculate the specimen in a noninhibitory medium and the subculture on to the selective media for the proper isolation of Pseudomonas species⁷. In this study, we found that the Modified Fishmeal Extract Agar media is far superior to other selective media

which are commonly used for the isolation of pseudomonas aeruginosa from clinical specimens as even a very scanty growth of Pseudomonas aeruginosa could be observed in the Modified Fishmeal extract agar for the selective isolation of Pseudomonas aeruginosa.

CONCLUSION

In conclusion this study has proved that in the selective isolation of pseudomonas aeruginosa from clinical specimens, the modified fish meal extract was better in the isolation rate compared to the pseudomonas isolation agar and cetrimide agar. This media is also found to be very cost effective as the raw materials used is very cheap compared to the other selective isolation of Pseudomonas aeruginosa which is obtained as a pure growth on the agar and is within the reach of every microbiology laboratory for routine bacteriological investigations whenever pseudomonas infections are suspected.

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DRUG PROFILE

Trospium Chloride

Indications and Usage: Trospium is an anticholinergic drug, indicated for the treatment of overactive bladder (OAB) with symptoms of urge urinary incontinence, urgency, and urinary frequency. **Dosage and Administration:** The recommended dosage is 20mg twice daily. The drug should be given with water on an empty stomach, at least one hour before the meal. **Contraindications:** The drug is contraindicated in patients with urinary retention, gastric retention, or uncontrolled narrow-angle glaucoma, and in patients who are at risk for these conditions. **Warning and precautions:** The drug should be administered with caution to patients with clinically significant bladder outflow obstruction or gastrointestinal obstructive disorders due to risk of urinary or gastric retention. In patients with narrow angle glaucoma, it should be used only with careful monitoring. The drug is not recommended for use in patients with severe renal impairment (creatinine clearance < 30mL/Min). Alcohol should not be consumed within 2hrs of administration, of the drug. **Adverse reactions:** These include dry mouth (10.7%) and constipation (8.5%). **Drug Interactions:** Trospium is metabolized by ester hydrolysis and is excreted by kidneys through tubular secretion and glomerular filtration. Concomitant use with digoxin did not effect the pharmacokinetics of either drug. The oral bioavailability was reduced following a high fat-content meal. **Use in specific population: Pregnancy:** In the post-parturition animal studies, Trospium chloride was excreted to a limited extent into the milk. **Pediatric:** The safety and effectiveness of the drug in Pediatric patients have not been established. **Renal Impairment:** Trospium is not recommended for use in patients with moderate to severe renal impairment. Caution is advised when the drug is used in patients with severe hepatic impairment.