





25 KCACON 2025

Silver Jubilee Conference of Karnataka Chapter of Anatomists

Under the aegis of Karnataka Chapter of Anatomists

Theme - Translational Anatomy: Syncytium of Tradition and Technology

SOUVENIR

Organised by: **Department of Anatomy**SDM College of Medical Sciences and Hospital, Dharwad



Silver Jubilee Celebration of Karnataka Chapter of Anatomists 22nd August 2025, at 06.00 pm to 09.00 pm

Preconference Workshops: 22nd August 2025 Conference: 23rd and 24th August 2025



consanguinity had normal karyotyping, continued their pregnancy. The newborn admitted to NICU for seizures was detected to have mucolipidosis. Case 3 with NT of 5mm, and normal karyotyping was detected to be Noonan syndrome. Early identification through advanced genetic testing facilitated more personalized prenatal care, allowing for appropriate counseling and management.

Conclusion: Increased NT should prompt clinicians to consider a wider range of genetic conditions beyond trisomies.

This case series emphasizes the importance of comprehensive genetic testing, including NIPT, CMA, and WES, to identify non-trisomic causes of increased NT. Early diagnosis enables informed clinical decisions, better prenatal management, and improved outcomes.

Keyword: Balanced - Nuchal translucency, Down's syndrome, Trisomy, Single gene disorders.

DATE:23rd AUG 2025

TIME: 4:00PM-5:30PM

SESSION: 2 (LH-2)

CATEGORY: MEDICAL EDUCATION

1. AT THE SYNCYTIUM OF TRADITION AND TECHNOLOGY: CADAVIZ ELEVATES UNDERGRADUATE MEDICAL LEARNING.

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Introduction: At the syncytium of tradition and technology lies CADAVIZ, a virtual dissection table that integrates digital innovation with anatomical knowledge. The present study evaluates the effectiveness of CADAVIZ in enhancing anatomical learning among undergraduate medical students at the Department of Anatomy, Sree Balaji Medical College and Hospital, Chennai.

Methodology: After obtaining ethical approval and informed consent, 102 participants were randomly assigned to Groups A, B, and C. The cerebellum was selected as the instructional focus of the study. A pre-test was administered to evaluate baseline knowledge. Following the lecture session, practical sessions were conducted using cadaveric specimens for Group A and CADAVIZ for Group B. Group C received both cadaveric demonstration and guided use of CADAVIZ. Finally, post-tests were conducted to assess knowledge retention.

Results: The mean pre-test and post-test scores were 4.85 ± 1.74 and 7.29 ± 2.02 for Group A, 4.74 ± 1.78 and 7.68 ± 1.43 for Group B, and 3.97 ± 1.14 and 7.06 ± 1.43 for Group C, respectively. Although Group B demonstrated a higher percentage increase (77.51 ± 8.35) than Group A (60.71 ± 8.77) , the difference was not statistically significant (p = 0.154). In contrast, the percentage increase (85.50 ± 7.46) in Group C was not only the highest but also statistically significant (p = 0.037) when compared to Group A, indicating that the combined instructional approach (Group C) significantly improved anatomical learning compared to cadaveric instruction alone (Group A). Statistical Analysis: Descriptive statistics, followed by ANCOVA were employed for data analysis.



Conclusion: Thus, when integrated with classical methods, digital innovations like CADAVIZ may enhance the retention of anatomical knowledge among undergraduate medical students.

Keywords: CADAVIZ, Cadaver, Virtual Dissection, Cerebellum, Anatomy

2. EXPLORING THE EFFICACY OF ROLEPLAY IN TEACHING ANATOMY AETCOM-MODULES

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Introduction: Anatomy education is a core part of medical training, where in Roleplay is a promising, interactive tool in fostering communication skills. This aligns with the AETCOM modules, which emphasize holistic development of medical professionals. This study aims to investigate the efficacy of roleplay in teaching AETCOM-Module 1.1: "What does it mean to be a doctor?" and Module 1.5: "The cadaver as a first teacher," addressing the need for rigorous research in this area.

Methodology: This study used a pretest-post-test design to assess roleplay's impact on learning Anatomy AETCOM Modules among 1st phase MBBS students. A pretest questionnaire assessed baseline understanding of AETCOM Modules 1.1 and 1.5, with questions aligned to learning objectives. A roleplay session, involving 15 voluntarily participating students, simulated real-life clinical scenarios related to the modules, with facilitators providing guidance. A post-test questionnaire, similar to the pretest, was administered immediately after to compare understanding. Data was analysed using descriptive statistics and paired t-tests.

Results: Both pre-test and post-test questionnaire responses were evaluated. The results showed a significant increase in student understanding of Anatomy AETCOM Modules after the roleplay session. The chi-square statistic was 69.6729, with a p-value of <0.00001, indicating statistical significance at p<0.05. This demonstrates that roleplay significantly enhanced student knowledge levels and is an effective teaching strategy.

Conclusion: This study adds to the evidence supporting roleplay's benefits in medical education. The findings suggest that incorporating roleplay activities into the curriculum can significantly enhance student knowledge and understanding of Anatomy AETCOM Modules.

Keywords: Roleplay, Anatomy, AETCOM, Medical Education, Experiential Learning, Communication Skills, Ethics.

3. EXPERT-ASSISTED LEARNING VS PEER-ASSISTED LEARNING – A COMPARISON STUDY FOR SMALL GROUP TEACHING

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Introduction: Innovative teaching methods are essential in medical education to enhance anatomical understanding.

While Expert-Assisted Learning (EAL) remains the conventional approach, Peer-assisted learning (PAL) has gained momentum for encouraging active student engagement. This quasi-experimental crossover study compared EAL and PAL in teaching axial skeleton osteology, a foundational but often underemphasized topic requiring spatial and structural clarity.

Methods: Fifty first-year MBBS students were divided into two groups (A and B) of 25 each. Group A, Group B underwent EAL, PAL respectively followed by the reverse sequence. Peers were selected through voluntary participation among academically forward learners. The topic chosen was axial skeleton osteology due to its