

I would like to thank the Scottish Radiological Society (SRS) for supporting my attendance at the 58<sup>th</sup> Annual Meeting of the American Society of Head and Neck Radiology (ASHNR).



ASHNR is one of the largest professional organisations in this radiological subspecialty field and hosts the premier Head and Neck Imaging meeting worldwide. The 58<sup>th</sup> ASHNR meeting took place from September 4-8<sup>th</sup> 2024, in Hilton San Diego Bayfront, California. The meeting is attended by hundreds of radiologists and held annually in rotating locations throughout the United States.

I was thrilled to give an oral presentation at this conference titled “Assessment of radiological extranodal extension and validation of a tiered rENE grading system in head and neck squamous cell carcinomas”.

### **Project Background**

Extra-nodal extension (ENE) is a determinant of TNM nodal staging in head and neck squamous cell carcinoma (HNSCC). Radiological extranodal extension (rENE) is an important independent adverse factor in this patient group; it is assessed on pre-treatment CT or MRI studies can be used to support the diagnosis of clinical ENE. Currently, a three-tiered grading system of rENE has been utilised to improve rENE sensitivity in reporting. These tiers are: ill-defined nodal margins, coalescence and adjacent structural invasion.

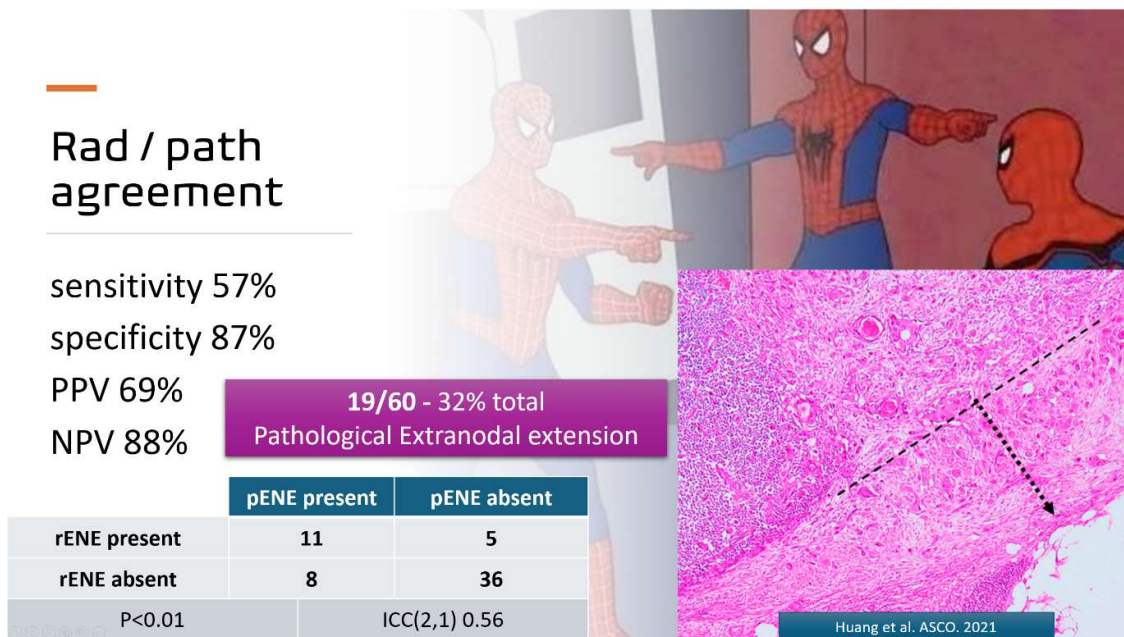
Working with consultant radiologists Dr Derek Smith, Dr Ana Casado and fellow registrar Dr Afreen Saheb, we completed a study which compared reporting practices for extranodal extension in DCN (Department for Clinical Neuroscience) Edinburgh, with the three-tiered system described in the literature.

Pre-treatment imaging for patients who underwent neck dissection for primary HNSCC in 2021-2022 from South East Scotland was reviewed, with pathological specimen diagnosis taken as gold standard. There was a high positive predictive value of imaging for pathological nodal disease (79%,  $p < 0.01$ ) and higher negative predictive value between rENE and pathological nodal disease (88%). Overall correlation of rENE and pENE however was borderline poor ( $p = 0.11$ , ICC 2,1 = 0.49).

Our study demonstrated that use of three-tiered rENE grading system showed good inter-rater agreement and increased detection rate compared with conventional reporting. There is however limited sensitivity when comparing radiological extranodal extension to pathological diagnosis.

## Presentation

The presentation was a great success and garnered much interest and many questions from the audience. Radiological extranodal extension is an important independent adverse factor for head and neck cancer patients and is set to play a key role in the next American Joint Committee on Cancer and TNM staging systems. There were also some good laughs at our more humorous slides.



It was a wonderful and surreal experience speaking on this platform and discussing my work directly with world experts in this field. I felt especially inspired to pursue head and neck radiology and have taken an interest in head and neck cancer in my training and career going forward.

## Conference

The ASHNR meeting has an excellent, comprehensive programme covering all aspects of head and neck radiology.

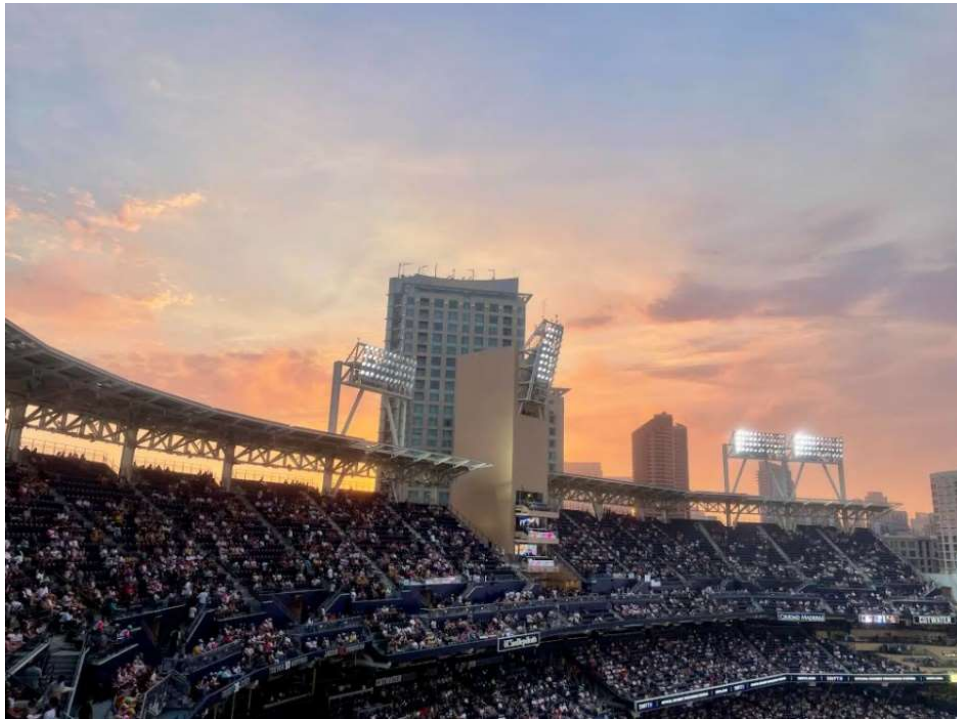
There were multiple clinically focused lectures, case presentations and structured teaching sessions across the 5-day meeting. Sessions ranged from traditional lecture-based teaching to more interactive sessions such as 'the mamas and the papas' where the expert panel went head to head in competitive teams, like a fun jeopardy style quiz. There were several presentations on cutting edge research and imaging techniques such as radiomics and photon counting CT. Additionally, there were 10 oral scientific presentations, hundreds of posters and educational exhibits such as 'Case of the day'. Thankfully all the sessions were recorded and available for review following the conference too.

Organising and coordinating the events were many extremely accomplished, approachable consultants and attendings who encouraged my interest in this field even further.

### **California Highlights**

San Diego provided the perfect setting and backdrop to balance such an action packed programme. The conference was based in the bay area of the city where we had a week of continuous sunshine and beautiful Californian sunsets. There was ample opportunity for networking with resident, consultant and attending colleagues at the post conference dinners and drinks events.

One of the highlights of the trip was attending a baseball game at Petco park with some colleagues at sunset:



Overall, I am extremely glad that I was able to attend this conference and have the opportunity to present my work. I would like to extend a special thank you to my supervisor, Dr Derek Smith, for his support with the project and presentation.

I am incredibly grateful to the SRS for providing financial support towards attending and presenting at this conference. This was an incredible experience and I look forward to attending similarly enriching international conferences in the future.

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