Conclusion: Interviewed patients seemed to prefer continuation of IA during an infection if possible. The concern of disease flare might form a barrier for temporary interruption, this is in line with a previous study, showing that RA patients fear disease flare after dose reduction [2].

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POS1486-HPR DAILY ACTIVITY IMPAIRMENT IS MEDIATED BY BOTH ORAL DRYNESS AND ORAL HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Background: Both oral functions and oral health-related quality of life (OHRQoL) are poorly affected by low salivary flow rate in patients with primary Sjögren's syndrome (pSS).

Objectives: The aim of the study was to evaluate the effects of oral dryness and OHRQoL on daily life in patients with primary Sjögren's syndrome (pSS).

Methods: In this cross-sectional study, 86 patients with pSS (M/F: 5/81; mean age: 52.4 ± 11.6 years) were included. The data were collected by clinical examination and a questionnaire regarding patient-reported outcome measures (PROMs). Patient filled PROMs regarding Oral Health Impact Profile-14 (OHIP-14) for OHRQoL, Work Productivity and Activity Impairment scale (WPAI) for Daily life and the EULAR Sjogren's Syndrome Patient Reported Index (ESSPRI) for their symptoms. Unstimulated whole saliva flow rates (U-WSFR) of patients were calculated as ml/min. Increases in PROMs and decreases in U-WSFR reflected poor conditions. After preliminary analysis, a mediation analysis was used to evaluate the relations among variables.

Results: WPAI-Daily activity impairment score was higher in patients with low U-WSFR (≤0,1 ml/min) than the others (67±29,8 vs 52,5±28,6) (p=0.042). Both U-WSFR (0,43±0,57 ml/min) and ESSPRI-Dryness score (6.31 ± 2.71) were correlated with scores of OHIP-14 (25,96±17,13)(r:- 0,38 p=0.000; r: 0,37 p=0.000) and WPAI-Daily activity impairment (57,96±29,71)(r: -0,36 p=0.004; r: 0,53 p=0.000). Moreover, scores of ESSPRI-Pain (5,16±3,12) and ESSPRI-Fatigue (5,41±2,97) were also related to WPAI-Daily activity impairment score (r: 0,41 p=0.001; r:0,49 p=0.000, respectively).

In the mediation analysis, WPAI-Daily activity impairment score (57.9 ± 29.7) was directly mediated by ESSPRI-Dryness score (p=0.0010) and indirectly mediated by OHIP-14 score (25.9 ± 17.1) (p=0.0357). After mediation analysis, a bootstrap analysis with 5000 replications was applied to estimate the mediation effect to generate 95% CI. Percentile bootstrap of OHIP-14 score was found to be an effective mediator for Daily activity impairment based on 5000 bootstrap samples.

Conclusion: Both oral dryness and poor OHRQoL in patients with pSS affected daily activity impairment. Therefore, the patients' needs for improving oral health were critical components of treatment plans to improve the daily activity of SjS patients.

Disclosure of Interests: None declared

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HPR Service developments, innovation and economics in healthcare

POS1487-HPR NEXT-GENERATION ONLINE TELEMEDICINE SYSTEM UTILIZING MIXED REALITY FOR RHEUMATOID ARTHRITIS

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Background: Telemedicine can be performed using a conventional videophone or web conferencing system. Then, joint lesions can only be observed and inferred from two-dimensional images, and it is difficult to perform accurate joint assessments, which is essential for the management of rheumatoid arthritis (RA).

Objectives: To develop the next-generation online telemedicine system utilizing mixed reality for RA.

Methods: We have developed a system that can assess joints accurately in three-dimensions images in real-time, using Azure Kinect DK (depth sensor)/ HoloLens 2 (headset), which are mixed reality technologies, and Teams (online interview/chat) provided by Microsoft. Furthermore, by applying artificial intelligence (AI), we plan to implement additionally to this system 1) a function to quickly catch and automatically evaluate the patient's anxiety and changes in facial expressions at the time of examination, 2) a function to record dialogue with the patient in chronological order, 3) a function to support the detection of swollen joints, and 4) function to automatically analyze the questionnaire.

Results: This system remotely connects a rheumatologist in the Nagasaki University Hospital (Nagasaki City, urban area) and a patient with RA and a non- rheumatologist in the Goto Central Hospital (Goto Island, rural area). A three-dimensional hologram of the patient's hand projected in front of a rheumatologist. Using this system, we are able to evaluate joints more accurately than using a conventional videophone or web conferencing system.

Conclusion: It is expected that this system will enable remote medical care specializing in rheumatology, which is standardized at a high level even in areas without rheumatologists such as remote islands and remote areas. This system remotely connects Nagasaki City and Goto Island, but due to the performance of the system, it is not limited to these areas and it is possible to connect rheumatologists to any area that can be connected to the network. It is also effective for the purpose of avoiding the risk of infection during long-distance hospital visits under the epidemic of COVID-19 infection.

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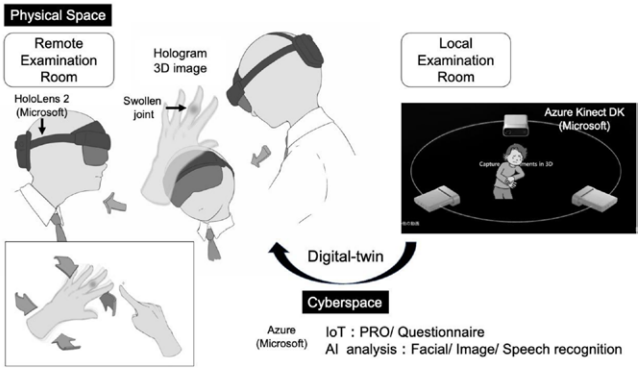
Figure



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POS1488-HPR CAN A SPECIALIST NURSE LEAD A COMPREHENSIVE OSTEOPOROSIS SERVICE WITH REMOTE SUPERVISION – AN INNOVATIVE CONCEPT

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Background: Specialist services traditionally rely on a consultant to lead a multidisciplinary team and provide patient facing activities. However, demand

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