patient blood test that could have meant an earlier diagnosis over a traditional laboratory blood test.

Conclusion: RA is difficult for PCPs to identify for early referral and treatment within 6-12 weeks of symptom onset. The clinicians and patients we surveyed reported positive perspectives regarding near-patient blood tests and mobile applications and welcome their use to assist with earlier referral and treatment. With the emergence of innovative near-patient technologies, opportunities exist to intervene earlier and potentially reduce the social and economic burden of chronic diseases.

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SAT0561 DIAGNOSTIC ACCURACY OF GOUT IN ELECTRONIC HEALTH RECORDS AND THE ROLE OF RHEUMATOLOGY ELECTRONIC CONSULTS
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Background: Gout is the most prevalent inflammatory arthritis globally. Despite treatment advances, it still has a significant effect on quality of life and healthcare costs. There have been inconsistent studies on administrative coding as an accurate marker of true diagnosis. Although gout can be solely managed by primary care physicians (PCPs), complex cases often require rheumatology consultation. The wait time for an initial rheumatology clinic visit ranges from 38 days to 47 weeks. However, electronic consults (e-consults) allow for swift two-way communication between PCPs and rheumatologists (pre-consult exchange) to facilitate coordination of care among providers.

Objectives: To determine the accuracy of gout diagnosis based on ICD 9 and 10 coding, and the differences in gout outcomes based on PCP management, e-consult or rheumatology clinic visits at two Veterans Affairs Medical Centers.

Methods: A retrospective cohort study was created from 2009-2014 including 101 e-consult patients and a control group of 176 patients. In the e-consult group, 78 patients were ICD 9 or 10 coded for gout; in the control group, 116 were ICD 9 or 10 coded for gout. A blinded abstractor determined the accuracy of gout coding based on chart review and EULAR criteria.

A second random sample of 183 gout patients from 2009-2014 was identified and stratified to 3 modes of management: PCP only (48), e-consult (68), and rheumatology clinic visit (67). Data was reviewed for 24 months following initial gout diagnosis or e-consult. Management was evaluated based on frequency of flares and related ED visits, creatinine clearance, and serum uric acid levels (sUA).

Results: The sensitivity and specificity of ICD coding for accurate gout diagnosis was 94% and 79% in the control (PPV 87%, NPV 90%). For e-consult patients, the sensitivity and specificity was 100% and 70% (PPV 87%, NPV 100%). E-consult patients were more accurately diagnosed with gout by PCPs than in the control group (p<0.03). 83% of e-consults were resolved electronically and 17% were converted to rheumatology clinic visits. The mean wait time for e-consult recommendations was 1.8 days. The mean clinic visit wait after pre-consult exchange was 22.9 days compared to an average of 43.1 days for direct rheumatology clinic visits. Both e-consult and rheumatology clinic patients had more gout flares and related ED visits at diagnosis compared to PCP care; however, at 12 months, both groups had significantly fewer gout-related ED visits, decreased sUA, and improved creatinine clearance (p<0.05).

Conclusion: VA databases are an accurate source of gout patients based on ICD coding. When viewing e-consults, rheumatologists can rely on accurate PCP gout diagnoses, confidently answer clinical questions, and triage more efficiently. E-consult serves as an effective alternative in managing gout with shorter wait times for recommendations and appointments while still reimbursing physicians at a reasonable rate. Therefore, complex gout management can be enhanced by e-consults to improve clinical outcomes, decrease gaps in care and optimize healthcare resources.

REFERENCES

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SAT0562 BURDEN OF RHEUMATIC DISEASE AMONG KOREAN WOMEN IN CHILDBEARING YEARS BASED ON THE NATIONAL HEALTH INSURANCE SERVICE
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Background: Many rheumatic diseases (RDs) predominantly affect women in their reproductive years, and have a significant impact on childbearing, but its burden remains incompletely understood.

Objectives: The study aimed to identify the prevalence and incidence of RDs among Korean women in childbearing years, and the effect of the diseases on prevalence of comorbidities, medication use, and pregnancy rate.

Methods: From National Health Insurance Service data during 2009-2016, we identified 9,217,119 women aged between 20-44 years. Among these women, we estimated the prevalence and incidence of RDs including rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), and ankylosing spondylitis (AS). Prevalence of chronic diseases such as cancer (Ca), hypertension (HT), hyperlipidemia (HLD), and diabetes mellitus (DM) was compared in women with or without RDs. The prescription prevalence of medications including NSAIDs and corticosteroids were compared according to the presence of RDs. We also investigated pregnancy rate in women with rheumatic or chronic diseases, and control subjects without rheumatic or chronic diseases.

Results: Overall prevalence of RDs was 56.3 per 100,000 20-44 aged females, and overall incidence was 7.68 cases per 100,000 person-years. Women with RDs had increased risk for overall chronic diseases (OR 3.0), and for Ca (OR 1.3), HT (OR 1.4), HLD (OR 2.9), and DM (OR 2.8), respectively (p<0.0001). The prescription of NSAIDs and steroids was significantly more frequent in women with RDs than those without (81.62% vs 21.79% in NSAIDs, 77.83% vs 4.28% in steroids, p<0.0001). Pregnancy rate was significantly lower in women with RDs compared with the controls (15.92% vs 19.30%, p<0.001). Among women with RDs, women with RA were less likely to become pregnant (OR 0.80, p<0.0001), whereas women with SLE and AS showed no significant difference in pregnancy rate compared with the normal controls.

Conclusion: RDs are a significant burden for women in childbearing years causing increased co-morbidities and medication use and causing reduced pregnancy rate.

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