中文題目:一社區醫院近年來沙門氏菌菌血症之流行病學與危險因子之探討

英文題目: Investigate the epidemiology and risk factor of Salmonella blood stream infections in one community hospital

作 者:廖忠信,陳詩典¹

服務單位:1衛福部嘉義醫院內科

Background: *Chyi-Yi Hospital* is one community hospital which is located at *Chyi-Yi City* and owns 705 beds available for acute and chronic habitants. There are upward trend of blood stream infection of *Salmonella* in these three years, especially of non-typhoidal *Salmonella*. So, we present one case and want to investigate the epidemiology and risk factors of these cases for better care.

Methods: From the databank of Datong Cooperative System, we obtain the cases which have positive blood cultures of *Salmonella* species during 2009 and 2020. Then we collect the related information of patients and bacteria. The former includes age, gender, care division, ward, symptom, sign, outcome and comorbidity. The latter includes antibiogram, stool cultures and treatment regimen.

Results: There are 32 cases fulfilled during the period of 2009 to 2020.

- 1. gender: male to female are 17 to 15.
- 2. age: greater or equal to 60y/o versus less than 60y/o are 25 versus 7
- distribution of year: 2009 (2), 2010 (3), 2012 (2), 2013 (3), 2014 (1), 2016 (3), 2017 (1), 2018 (6), 2019 (5), 2020 (6)
- 4. outcome: MBD (16), die (10; 6- hospitalization, 4- within half a year), refer ((4), AAD (2)
- 5. diarrhea: yes (12), no (20) => stool culture: Salmonella (7), normal flora (5) and abd echo (18) results would be presented
- 6. relative bradycardia: 3 fulfilled in 12 cases and comorbidity wound be presented
- 7. treatment of regimen: 3 cefa (32), FQ (23), SXT (23), BL-BLI (19), carbapenem (5)
- 8. species of Salmonella: D1 (14), spp. (10), B (5), C1/C2 (1/1), typhi (1)
- 9. report day of culture: 3 day (3), 4 day (4), 5 day (5), 6 day (5), 7 day (3), 8 day (5), 9 day (3), 10 day (2), 11 day (1), 13 day (1)
- 10. drug sensitivity: 3 cefa (32/33; 97%), SXT (23/28; 82%), FQ (23/25; 92%), BL-BLI (19/25; 76%), carbapenem (5/5; 100%)

Conclusion: *Salmonella* blood stream infections have high morbidity and mortality (31%) than other bacteria. Non-typhoidal *Salmonella* are predominant than *S. typhi* for years. Due to not dominant strains of blood stream infection and report day of culture are longer than other bacteria, the time of definitive diagnosis are delayed and severe cases are still on the high side. So, we have to give timely, appropriate antibiotics and control comorbidity to improve the outcome and quality of life.