



Molecular Detection of the clumping factor (fibrinogen receptor) in the Enterotoxigenic *S. aureus* isolated from Raw Milk and Traditional Cheese

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Abstract : The objective of this study was to determine the occurrence of the enterotoxigenic *S. aureus* within 205 raw milk and traditional cheese samples examined. The *S. aureus* strains isolated from raw milk and traditional cheese samples examined were 50 (58.8%, 50/85) and 55 (45.8%, 55/120) respectively however both camel milk and cream cheese samples had not any *S. aureus* detected. The isolated *S. aureus* were screened for the presence of the clumping factor encoding gene (*clfA* gene) by PCR; all of the isolated 105 (100%, 105/105) *S. aureus* strains carried the *clfA* gene. The isolated *S. aureus* were molecular screened for the presence of the staphylococcal enterotoxin encoding genes (SEs); *Sea*, *Seb*, *Sec*, *Sed*, and *See* by multiplex PCR; 6 (5.7%, 6 /105), 4 (3.8%, 4 /105), and 3 (2.9%, 3 /105) carried the, *Seb*, *See*, *Sed* genes respectively. The detection of the 13 (12.4%, 13/105) enterotoxigenic *S. aureus* strain in the present investigation is considered a potential public health hazard which should be taken into consideration to find the possible strategies for prevention. The most frequent enterotoxin encoding genes detected were *seb* 6 (5.7%, 6/105), *see* 4 (3.8%, 4/105), and *sed* 3 (2.9%, 3/105) respectively. There was not found any *S. aureus* carried neither for *Sea* nor *Sec* genes.

Keywords : Enterotoxigenic, *S. aureus*, clumping factor, *clfA*, *Sea*, *Seb*, *Sec*, *Sed*, *See*, Milk, Cheese.

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