Overheating of KaVo Surgical Handpieces (12/07)

The Air Force Medical Logistics Office (AFMLO) has forwarded to DECS a Medical Material Complaint action recently processed by the Defense Support Center Philadelphia (DSCP). The Material Complaint action involved the overheating of a contra angle attachment on a KaVo INTRAsurge 500 surgical handpiece, which caused intraoral burns to a patient during a surgical procedure. In the past, DECS has found that similar overheating problems are usually caused by failure of the bearings at the distal end of the handpiece and/or attachment. In these situations, bearing failure can produce heat to the degree that intraoral tissues can be damaged. Bearing failure can be due to many factors, but in most cases it occurs because of improper cleaning which allows residual debris to become lodged in the bearing assembly. Overheating can also be the result of improper handpiece lubrication and maintenance, which tends to accelerate bearing wear and precipitate failure. DECS recommends that particular attention be directed to the cleaning and maintenance of surgical handpieces. It is also suggested that clinicians hold the distal end of the handpiece and operate it prior to beginning a procedure. Checking for abnormal heat production in this way will further ensure that the problem is avoided.