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Abnormally Delayed Healing Of A Bruise - A Case Report

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ABSTRACT

Abstract (English)

Bruise is defined as the extravasation of blood in the tissues as a result of blunt force impact to the body. Usually about two weeks' period is required for healing of bruises under normal conditions. This is widely mentioned in the currently literature. In the present case however, the bruises were well discernible even after 49 days of its production! This case proves that a medicolegal expert must base his opinion regarding the age of bruise with great care. It has rightly been said in medico-legal practice "The things are not always what they appear to be".

Abstract (German, Deutsch)

Quetschung wird als das extravasation des Bluts in den Geweben resultierend aus stumpfer Kraftauswirkung zum Körper definiert. Eine Periode normalerweise ungefähr zwei Wochen wird für das Heilend der Quetschungen unter normalen Bedingungen angefordert. Dieses wird weit in der aktuell Literatur erwähnt. Im anwesenden Fall jedoch, waren die Quetschungen gut sogar nach 49 Tagen seiner Produktion wahrnehmbar! Dieser Fall prüft, daß ein medicolegal Experte seine Meinung betreffend ist das Alter der Quetschung mit großer Obacht gründen muß. Es ist mit Recht in der medico-zugelassenen Praxis gesagt worden, "welches die Sachen nicht immer sind, was sie scheinen, zu sein".

Click here to go to full German translation.

Abstract (French, Française)

La contusion est définie comme extravasation de sang dans les tissus en raison de l'impact émoussé de force au corps. La période d'habituellement environ deux semaines est exigée pour curatif des

contusions dans des conditions normales. Ceci est largement mentionné dans actuel la littérature. Dans le cas actuel cependant, les contusions étaient bien perceptibles même après 49 jours de sa production! Ce cas montre qu'un expert medicolegal doit baser son avis concernant l'âge de la contusion avec grand soin. On lui a correctement dit dans la pratique medico-légale " que les choses ne sont pas toujours ce qui être elles semblent".

Abstract (Italian)

La contusione è definita come il extravasation di anima nei tessuti come conseguenza di effetto smussato della forza al corpo. Un periodo di solitamente circa due settimane è richiesto per healing delle contusioni nelle circostanze normali. Ciò ampiamente è accennata attualmente nella letteratura. Nel caso attuale tuttavia, le contusioni erano bene distinguibili anche dopo 49 giorni della relativa produzione! Questo caso dimostra che un esperto medicolegal deve basare il suo parere per quanto riguarda l' età della contusione con cura grande. Si è detto giustamente nella pratica medico-legale " che le cose non sono sempre che cosa sembrano essere".

Abstract (Portuguese, Português)

O bruise é definido como o extravasation do sangue nos tecidos em conseqüência do impacto sem corte da força ao corpo. Um período de geralmente aproximadamente duas semanas é requerido healing dos bruises sob circunstâncias normais. Isto é mencionado extensamente atualmente na literatura. No caso atual entretanto, os bruises eram bem discernible mesmo após 49 dias de sua produção! Este caso prova que um perito medicolegal deve basear sua opinião a respeito da idade do bruise com cuidado grande. Direita disse-se na prática medico-legal "que as coisas não são sempre o que parecem ser".

Abstract (Spanish, Español)

La contusión se define como el extravasation de la sangre en los tejidos finos como resultado de impacto embotado de la fuerza al cuerpo. El período de generalmente cerca de dos semanas se requiere para curativo de contusiones bajo condiciones normales. Esto se menciona extensamente en actualmente la literatura. En el actual caso sin embargo, las contusiones eran bien perceptibles incluso después de 49 días de su producción! Este caso prueba que un experto medicolegal debe basar su opinión con respecto a la edad de la contusión con gran cuidado. Se ha dicho derecho en práctica medico-legal " que las cosas no son siempre lo que aparecen ser".

Keywords: Bruises, Contusions, Injuries, Blunt force, Clinical Forensic Medicine, Healing of Injuries

Case History



Figure 1: Persistence of Bruises on the back after 49 days of infliction. N.B. Click this photo (as well as the other photo) to enlarge

A 35 year well built male alleged that on 25.6.98 he was assaulted, by some persons with *lathis* (blunt wooden rods used in India for beating and other criminal activities) and axe etc. He was medico-legally examined at a peripheral hospital. The Medical Officer opined that all the injuries were caused by blunt weapons. The victim was however not satisfied with his opinion. To get a second opinion, he knocked the doors of the court. Therefore on judicial orders he was referred to the department of Forensic Medicine PGIMS, Rohtak on 13.8.98 for re-medical examination. Earlier Medicolegal Report dated 25.6.98 showed three oblique lacerated wounds on the scalp, one lacerated wound on the right knee and multiple bruises on the back with rail road pattern.

Estimating the age of bruise is a problem frequently faced by a practising medicolegist. The exercise is fraught with danger, especially as no criteria for estimation of age can be fixed. Older text books however were very specific and dogmatic on this issue. For instance the tenth edition of the classic *Forensic Medicine* by Sir Sydney Smith and Frederick Smith Fiddes (Published in 1955) states at page 110:

The red color changes to purple or almost black very soon after the injury. In four or five days the color changes to green; in seven to ten days it becomes yellow, and gradually disappears in fourteen to fifteen days. But the color changes and ultimate disappearance of a bruise may vary over a period of from one to four weeks, depending on their severity and the constitution of the victim.

Despite observations to the contrary, authors continued to repeat this dictum in their textbooks, probably because it seemed such a pity jettisoning such a "nice and neat sounding" color calender. Perhaps the first modern author to discard these ideas was Bernard Knight. In his classic *Forensic Pathology, 2nd edition, 1996* he states at page 143:

It is not practicable to construct an accurate calender of these color changes, as was done in older textbooks, as there are too many variables for this to be reliable.

The current paper by Paliwal et al. seems to corroborate this statement by Knight. *-Anil Aggrawal (Editor-in-Chief)*

Examination on 13.8.98 revealed that the lacerated wounds were completely healed and were showing regular clear margins. So the dispute regarding the weapon of offence was sorted out on examination. But coincidentally the bruises which were noted down by Medical Officer at the peripheral hospital were still persisting with a hue of light brownish colour which clearly indicated that the site of bruise was the same as that one observed by the medical officer at the peripheral (district) hospital. So the most amazing thing was in this case that the bruises were present even after 49 days of their infliction.

Discussion

Healing of bruise usually occurs in 2 to 4 weeks' period[1-5]. However conditions such as far advanced senility, cachexia, very severe and multiple injuries may impair the local tissue reactions[6]. In ordinary circumstances, disappearance of a bruise depends upon the nature and severity of the force used, the vascularity of the part, the amount of subcutaneous tissue and fat and the looseness of the underlying cellular tissues[7].

In the present case, the subject was a 35 year old male who was well built and healthy with no history of acute or chronic illnesses, cachexia or any apparent pathological conditions affecting healing of injuries or causing delayed healing. Yet he showed bruises as long as 49 days after their infliction. The bruises were however present on the back of chest and abdomen having comparatively less blood supply. This could probably be the reason for delayed healing.

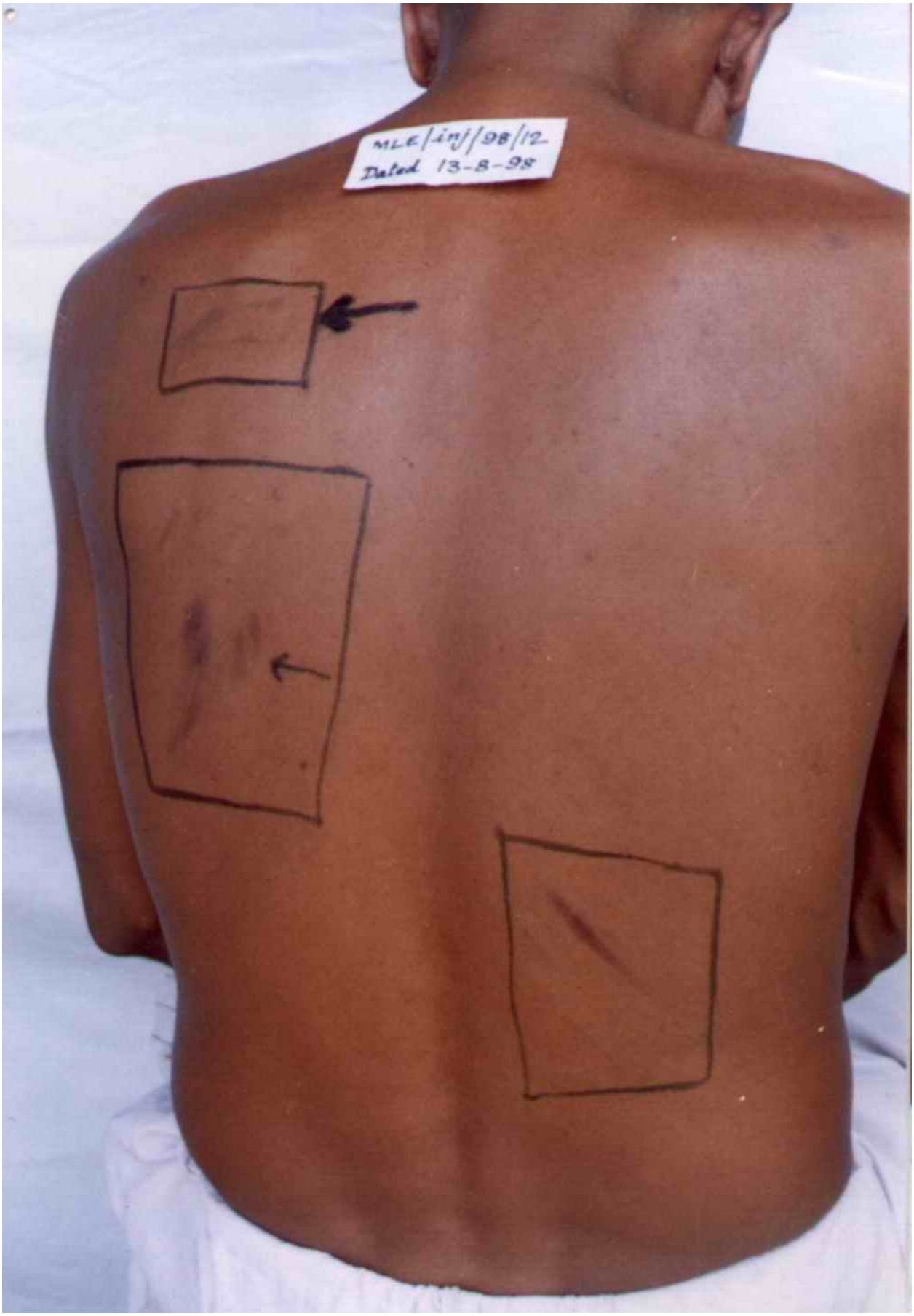


Figure 2: Persistence of Bruises on the back after 49 days of infliction. The three groups of bruises have been demarcated

Conclusion

This was an interesting case in the sense that the bruises persisted even after 7 weeks which is not mentioned in the literature. The possible reason for such a delay could be their presence at the back. Medicolegal practitioners would do well to keep this fact in mind before opining on the age of bruises.

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