Abstract
Child abuse constitutes one of the most difficult areas of paediatric practice in Malta and, sadly, non accidental injury (NAI) is not only relatively common but is also increasing in incidence. The multi-factorial and socially complex aetiology of child abuse makes its eradication at source very difficult indeed. Nevertheless, the significant negative impact of this diagnosis on the affected child, both in the immediacy as well as in the long term, dictates damage-limitation through early identification and appropriate management. To this end, local awareness of the magnitude of the problem has galvanized the relevant authorities who have now established efficient tracking and processing protocols for cases of NAI, covering medical, social, legal and police aspects.

Key words
Child abuse, Malta

Introduction
Child abuse is not a modern phenomenon and child sacrifice, the ultimate form of child abuse, was commonplace in ancient times, often as a means to appease a god or deity. Reassuringly, there is no definitive evidence of human sacrifice in Malta’s history. More recently, death in childhood via non-accidental means is an extremely rare event certainly when compared with other countries where firearms are commonplace and a significant cause for paedicide. However, maltreatment certainly does not need to result in death to qualify as abuse and, indeed, most abuse results in physical and/or emotional harm that may have long lasting effects.

‘Group-based’ child abuse in the form of child slavery, prostitution, underage employment etc, although not uncommon worldwide particularly in less ‘developed’ countries, is not widespread in Malta. Nevertheless, abuse at the individual level and generally involving physical maltreatment remains a scourge of ‘modern’ society, even in the 21st century. Furthermore, it is not limited to developing countries but is widespread in many ‘developed’ countries including those that top world rankings in Gross National Product (GNP) and standard of living, including the European Union, Scandinavia and the United States. In this regard, Malta is no exception and, from 1993 up to 2006, Ażenzija Appożż recorded 6,442 reports under the Child Protection Services involving some form of child abuse (including multiple reports on the same case(s)).

As in other countries, Figure 1 confirms an increasing local trend in the diagnosis of NAI. However, is this change ‘real’ or simply due to increased awareness and improved diagnosis? Is it related to changes in social acceptability: in the extreme, the treatment of Isaac in the Old Testament, albeit as a test of Abraham’s loyalty to God would, by ‘modern’ standards, be construed as totally unacceptable behaviour and tantamount to abuse (Figure 2). On a more practical level, whereas corporal punishment was generally acceptable 30 years ago, today’s no tolerance approach has resulted in many a parent and teacher being found guilty (in the UK, for example) of criminal bodily harm for even the most minor slap.

The clinical presentation
The scenario
The prevailing scenario is often predictable and, in many cases of NAI, is ‘conducive’ long before the abuse occurs. Risk factors would include parental substance abuse, mental illness
especially in the mother, domestic violence, single unsupported parents, and a history of childhood abuse in the carers. Hence, NAI is significantly more likely in the hopelessly chaotic family with the ‘rotating-boyfriend-of-the-week’ syndrome who is usually not the genetic father and, often, the perpetrator. Poor social circumstances may be contributory factors, but NAI is certainly not the exclusive prerogative of lower social classes. Indeed, since 1993 when records were first documented, cases have been referred to Aġenzija Appoġġ from all geographical districts of Malta and Gozo (Figure 3).3 Boys and girls are both affected (1:1.5), generally aged 6–15 years (55% of referrals), whilst preschool children make up 12% of cases.3 The majority involve otherwise healthy children, although unwanted demanding children who may have an additional (and confounding) medical problem are slightly more at risk. A past history of abuse, repeated spurious hospital admissions and entry in special ‘at risk’ registers known to social work departments (if applicable) must be verified in all suspected cases. Finally, the adage that ‘the previously abused become themselves abusers’ is sadly true.

History

The euphemism ‘smelling a rat’ is apt in the context of child abuse and, as with all aspects of clinical acumen, matures with time. A ‘healthy but balanced’ suspicion must be maintained when interviewing parents or carers of children presenting with any injury that is, a prima facia, not easily explicable and may, therefore, be non accidental. Hence, whilst NAI is unlikely in the boisterous five year old with a cut on the head following a ‘legitimate’ fall, it is likely if the same story is offered in an identical child with multiple linear lacerations all over the back and buttocks. Such incompatibilities in the presenting history, together with unexplained delays in presentation (particularly with bruises and fractures), inconsistencies and repeated alterations in the story should raise suspicions. Unfortunately, the situation is increasingly complicated in Malta by estranged couples fabricating claims of abuse on their offspring by their ex-partner, thereby using the children as a battering ram to ‘get at’ their opposite number. Nevertheless, a ‘balanced’ index of suspicion must be maintained by all since just 2% of referrals to the Child Protection Services come directly from Health Services.3 The majority are referred from various Appoġġ services (30%), relatives (27%), other protection agencies (25%), Education services (12%) and the Police (4%).3

Examination

As with the history, suspicion is raised with injuries that are inconsistent with the story, especially where there has been delayed presentation or the unreasonable use of force – applicable in the four month old (and therefore yet unable to sit unaided), who presents with gross swelling and yellow (i.e. probably >5 days old) bruising of the elbow, said to be the result of “getting his arm caught in the cot sides.” Multiple injuries, injuries on unusual sites (e.g. pinch marks on the breast area), and injuries of differing age (especially fractures) are indicative of NAI. At times injuries can be ‘soft’ (e.g. minor lacerations and bruises on the limbs) and may raise the level of alertness but not necessarily lead to a formal investigation or indictment. Other injuries are, in themselves, highly suspicious, e.g. multiple cigarette burns, immersion burns, multiple rib fractures, intra-cerebral and retinal ‘shaking’ haemorrhages and, at times, virtually advertise ‘NAI’, e.g. the infant presenting with a large, triangular-shaped burn on the buttocks with the name Rowenta® embossed within.

A thorough examination is essential in all suspected cases.4 All injuries must be carefully documented with simple but clear annotations, complete with measurements and graphic descriptions (e.g. “yellow-green bruise over mid flexor aspect, left forearm measuring 2 x 5 cm”). This will prove invaluable in a court of law, particularly when the latter may post-date the event by an interval spanning several months or even years (with a corresponding decay in one’s memory). Ultimately, a conviction is highly dependent on the accuracy and reliability of the medical testimony.

Types of abuse

National statistics, as in other countries, show that physical abuse comprises around 30% of cases and is the most common type of NAI seen locally, with a lower incidence of neglect/ abandonment (24%).3 Sexual abuse comprises 17% and emotional abuse 6%; although all types of NAI are likely to be under-reported (Figure 4).

Figure 1: Case turnover of child abuse, Malta, 1993-2006

Figure 2: The sacrifice of Isaac, Michelangelo Merisi da Caravaggio, c1602: Tantamount to child abuse?
Physical abuse arises when a child is subjected to physical injury involving non-accidental intent and unreasonable force. Abuse has been described as the difference between a slap on the buttocks and a punch in the face but, nowadays, any degree of non affectionate physical contact is construed as abuse. This can be taken to extremes with, for example, minor tweaks of an errant child’s ear by an admonishing parent potentially resulting in legal proceedings.

Physical abuse is manifest in several ways (Table 1), the most common being scratches and bruising through beating, the latter being found in 28-92% of children who have suffered physical NAI. Clear documentation of their position and compatibility with (any) story provided is paramount, although recent reports cast doubt as to the reliability of aging bruises by their colour. Bites must be photographed and measured (Figure 5) and, especially if recent, can provide important clues particularly since adult perpetrators will commonly attribute the bites to an unsuspecting toddler. Burns may result from adults using the victim to ‘stub out’ their cigarettes, application of hot objects to skin (e.g. fire pokers, steam irons, etc), or intentional immersion into over-hot bath water (compounded by the widespread local custom of over-setting household water heaters). Immersion injuries are often blamed on a sibling turning on the hot tap whilst the victim was in the tub, but the ‘immersion’ pattern of the resulting burns negates this explanation (Figure 6). Blunt trauma, ligation, whip and belt marks are generally identifiable by the characteristic pattern of injury (Figure 7).

Fractures must be looked for and any child with suspected NAI, unless trivial, should undergo a ‘body-gram’ including the skull, ribs and limbs. Delayed presentation, an incompatible history, multiple and old fractures are key points in the diagnosis of NAI. Head injuries are a leading cause of mortality in the context of NAI, especially in vulnerable infants aged a few months who have yet to develop adequate head control. The classical shaken baby syndrome results in to and fro impactions of the brain within the cranium, causing widespread oedema, contusions and bleeding from delicate intra-cerebral and retinal blood vessels and, hence, the importance of fundoscopy in the unexplained comatose infant (Figure 8).

### Table 1: Physical non accidental injuries

<table>
<thead>
<tr>
<th>Injury</th>
<th>Types</th>
<th>Suspicious findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruises</td>
<td>Direct blow e.g. fist, flat object, beating, pinching</td>
<td>Multiple and different ages, unusual sites</td>
</tr>
<tr>
<td>Lacerations, ligatures</td>
<td>Whip, cord, belt, ligature marks</td>
<td>Multiple, typical sites e.g neck, wrists, buttocks, ‘carry over’ welts from cords/belts</td>
</tr>
<tr>
<td>Bites, forceful grip</td>
<td>Bruises in circular pattern</td>
<td>Compatible with adult size</td>
</tr>
<tr>
<td>Burns</td>
<td>Cigarettes, immersion, hot objects e.g. poker, iron</td>
<td>Multiple and of varying age, immersion pattern</td>
</tr>
<tr>
<td>Musculo-skeletal</td>
<td>Fractures e.g. long bones, ribs, skull, vertebrae Joint and metaphysseal damage</td>
<td>Multiple, old callus and new fractures, unusual sites (e.g. scapula)</td>
</tr>
<tr>
<td>Head injury</td>
<td>Skull fracture Bleeds: intracerebral, ventricular, along falx, subdural, extradural</td>
<td>Unexplained coma, incompatible story, retinal haemorrhages</td>
</tr>
</tbody>
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Emotional abuse and neglect
Abuse by neglect or omission of physical support may lead to failure to thrive and developmental delay, often associated with an unkempt child with unwashed clothes and soiled nappies, skin rashes and infestations (e.g. lice and scabies). Poor dietary attention may result in deficiency states (e.g. iron, calcium, vitamin D, C). Children deprived of basic love and emotional support generally manifest inappropriate behaviour, flat affect or exaggerated clinging and may have long-term deleterious sequelae with normal human relationships. The same applies for those exposed to emotional terror, constant fear and inappropriate punishments (e.g. prolonged lock-up in dark cells, balconies, etc).

Sexual abuse
The dictum that ‘the child’s story is the single most important piece of evidence’ remains true, particularly in the context of suspected sexual abuse. In Malta, the male:female ratio of sexual abuse is 1:5 although many cases involve young school or pre-school age children who may delay or not report the event at all. Furthermore, penetration of the genitals is unusual and external physical signs are often absent — indeed, physical abnormalities were found in just 2 out of 11 cases in one local review. For these reasons, it is likely that this form of NAI is far more common than statistics would suggest and generally takes the form of inappropriate sexual exposure and/or fingering/touching by an adult who may well be known or related to the child. Overt penetration (both vaginal and/or anal, Figure 9), rape and organised prostitution are less common. Victims may present with inappropriate sexualized or precocious behaviour, mannerisms or speech, general emotional lability and regression in schoolwork, whilst physical signs are often absent. Nonetheless, the risk of local physical injury and any accompanying sexually transmitted infections must be considered.

Munchausen syndrome by proxy
Although much publicized, abuse by proxy is rare and, in Malta, is diagnosed once every 10 years. The problem centres around an adult (almost always the mother) who herself is dominant, obsessive, manipulative and convincing, yet insecure with a significant psychiatric disorder. She systematically fabricates illness in the child, sometimes assisted with poisoning and/or drug side-effects, and procures lengthy and sometimes invasive therapies/procedures as a means of attracting attention. The mother may have a medical background and the child is invariably still too young/dependent to resist any inappropriate attention. Sometimes a genuine underlying illness in the child is a confusing variable. The skill in falsifying symptoms and signs, often over several years, associated with apparent plausibility and extreme denial on the part of mother make this form of NAI extremely difficult to prove.

Social abuse
Abuse with a social dimension is more common in underdeveloped countries where a lack of even basic education and abject poverty prevail. The absence or poor control of authority encourages the unscrupulous into organising child prostitution, underage employment, slavery and recruitment into combative armies. Exposure to illicit drugs and ‘vice’ in general augurs poorly for the future of those affected and is an increasing problem on the local scene. Finally, illegal and coerced adoption is a problem in mainland Europe and is not solely confined to the Asian or African continents.

Management
Although working with children in any guise necessitates a healthy suspicion for NAI, examples where this has been overstated or quite simply fabricated out of all semblance of reality abound. Perhaps this is best exemplified by the debacle in Cleveland, UK, in 1987 where multiple families were indicted for sexual abuse based on the unreliable and discredited ‘anal reflex dilatation’ whilst under anaesthesia for minor (unrelated) procedures. More recently, the importance of a balanced
approach is highlighted by the overturning of prison sentences of several bereaved mothers convicted of child murder on the basis of the testimony of Professor Sir Roy Meadows, until recently acknowledged as the leading authority on child abuse. His testimony was discredited in court and, indeed, he was found guilty of serious professional misconduct by the GMC, UK in 2005, a ruling that was later overturned on appeal in 2006. Nevertheless, for the children and families involved, the ordeal and double tragedy cannot be understated.

A reasonable diagnosis of abuse must, therefore, be based on a credible history combined with suspicious clinical signs. Care must be taken to avoid confusion with problems that may mimic NAI (Table 2). Management, centres around the primary treatment of the injuries, involvement of social services and, if necessary, the police. When reporting suspected cases of child abuse to social workers or the police, parental consent is not required. Indeed, where such action is taken in the best interest of the child, those filing the report are protected against litigation by the Data Protection Act (Malta, 2004). The primary aim is to allow the child to remain within the family, with appropriate support. Only when this is unsafe or there is a need for medical/surgical intervention, are children placed in a refuge of safety. This may include an acute hospital ward followed by a care facility, foster home or institution pending a case conference, due legal process and ‘settlement’. Wherever possible, the family should be encouraged to co-operate and allow for transfer to a foster home or institution pending a case conference, due legal process and ‘settlement’. Wherever possible, the family should be encouraged to co-operate and allow for transfer to a foster home or institution pending a case conference, due legal process and ‘settlement’.

Trends, services and the future

Although the recent increasing trend in recoded cases of abuse may have plateaued (Figure 1), local statistics nevertheless confirm a worrying number of abused children per annum. Heightened awareness, reportage and better diagnosis partly ‘explains’ the figures, but the increase remains real and is the result of many predisposing phenomena including disintegration of social protective barriers, family fragmentation, increase in unwanted babies, pressures of parenting, daily ‘stress’ and crime, especially associated with illicit drug use.

Over the past decade, there has been an increasing realization of the growing problem of child abuse by local authorities. Following a prolonged period of under-diagnosis of NAI even by paediatricians, services to cater for child abuse have increased steadily. The acute medical services are now fully tuned in to this diagnosis and maintain a healthy state of suspicion in all departments. The original Butterfly Centre set up in 1997 by the Social Services Department employed one junior doctor. The work of the unit is now managed jointly by Agenzija Appoqij and a full time paediatric senior registrar from the Department of Paediatrics. Hospital cases are supported by social services based at St. Luke’s and in the community by Agenzija Appoqij. The setting up of the Vice Squad (with responsibility for sexual abuse) within the Malta Police Force in 1998, and the Family Court in 2001, have considerably improved the overall liaison and medico-socio-legal package available. The policy of trauma limitation for these children is paramount and maintained whenever possible with, for example, the introduction of video-conferencing of abused children giving evidence in court.

Although a specific ‘At Risk Register’ is not yet available locally, improved collaboration between all services involved in Child Abuse have considerably improved the flagging up of potential cases or problem families. Whereas a child helpline (number 179 manned by Appoqij) and NAI protocols e.g. for referral and acute management both during and after hours at St. Lake’s have been established, some lacunae persist. In particular, a formal protocol for the management of victims of rape (alleged or otherwise) remains notable by its absence. These particularly delicate cases request a holistic approach, carried out by sympathetic, trained and experienced practitioners along standardized guidelines. Such a protocol would define the appropriately sensitive modus operandi required to handle rape cases at a national level, and ensure that such victims are not, ipso facto, ‘raped again’ by an indelicate approach in management. For example, according to the American Academy of Pediatrics, urgent and invasive investigation would only be indicated within 72 hours of the last penetration/event, and/or in the event of bleeding and/or signs of acute injury. Such a protocol would address issues such as the personnel involved, training, setting and location for assessment/examination, collection of samples, photo-documentation, etc.

Finally, although foster care is preferable to residential care, the local option for fostering remains relatively unavailable. In 1997, just 27 children were fostered and though the number rose to 156 and 185 in 2004 and 2005, these figures were well below the 425 and 282 children placed in residential care due to an unacceptable or abusive family environment in the corresponding time periods. The small size of the country makes anonymity of potential foster carers difficult to uphold, accessibility by (often) violent parents is far too easy, and the

**Figure 6:** Classical immersion burn injury

**Figure 7:** Blunt injury with cricket bat with sparing of natal cleft and bruises 'fading' laterally
lack of appropriate support and, more importantly, protection (including police cover) further discourages potential foster carers.

Conclusion

Child abuse is a real and ever-increasing problem with complex, multi-factorial origins. Eradicating NAI at source is extremely difficult and will entail major reversals in various contributory factors such as man’s inherent nature, family discord, social disharmony, criminal circumstances and habits, all of which would apply to Malta. However, much can and has been done locally to root out suspected cases and manage these appropriately with the ultimate aim being to protect the child. Of concern, therefore, would be the local identification of a trend, currently being observed in the UK, involving the reluctance of child care workers including paediatricians to get involved in cases of NAI. This is due to the general unpleasantness and commitment related to each case, as well as a fear of counter-litigation (RCPCH survey 2004). Hence, the importance of maintaining a suspicion that is both ‘reasonable and balanced’ but, certainly, where due concerns arise, it is the child’s interests that a report is lodged. Every genuine case that goes unreported translates into yet another child who will continue to suffer, has a significantly increased incidence of additional medico-psychosocial problems, and feeds the viscous cycle of abuse. Ultimately, our concern must always be directed primarily to the child.

Acknowledgements

We would strongly acknowledge our colleagues from Appogg Agency, social workers, residential home carers and all those involved in the management of abused children.

References

12. GMC Report on Prof Sir Roy Meadow, dated 15.7.05. http://www.gmc-uk.org/search/roy

Figure 8: Retinal haemorrhages in fatal head-shaking injury

Figure 9: Chronic irritation and dilatation secondary to repeated anal abuse